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<210> 5974

<211> 107

<212> PRT

<213> Homo sapiens

<400> 5974

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			20					25					30		
His	Pro	Gly	Pro	Ser	Leu	Thr	Ser	Gly	Ala	Leu	Thr	His	Ile	Arg	Asp
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Pro	His	Pro	Gly	Leu	Ser	Pro	Thr	Ser	Gly	Thr	Leu	Met	Pro	Gly	Arg
		50				55					60				
Arg	Arg	Gly	Gly	Pro	Ser	Phe	Gly	Thr	Pro	Ala	Leu	Arg	Arg	Arg	Lys
65					70					75					80
Cys	His	Arg	Glu	Ala	Pro	Ala	Ser	Gly	Leu	Ser	Thr	Ala	Ala	Arg	Glu
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<211> 2175

<212> DNA

<213> Homo sapiens

<400> 5975

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<210> 5976  
 <211> 564  
 <212> PRT  
 <213> Homo sapiens

<400> 5976

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			20					25					30		
Asp	Leu	Ala	Tyr	Glu	Arg	Gln	Tyr	Glu	Gln	Gln	Thr	Tyr	Gln	Val	Ile
		35					40					45			
Pro	Glu	Val	Ile	Lys	Asn	Phe	Ile	Gln	Tyr	Phe	His	Lys	Thr	Val	Ser
	50					55					60				
Asp	Leu	Ile	Asp	Gln	Lys	Val	Tyr	Glu	Leu	Gln	Ala	Ser	Arg	Val	Ser
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Ser	Asp	Val	Ile	Asp	Gln	Lys	Val	Tyr	Glu	Ile	Gln	Asp	Ile	Tyr	Glu
				85					90					95	
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Pro	Glu	Ala	Glu	Ala	Ile	Ala	Pro	Gln	Val	Gly	Asn	Asp	Ala	Val	Phe
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Cys	Asn	Leu	Phe	Asn	Tyr	Ile	Leu	Asn	Ala	Asp	Gly	Pro	Ala	Pro	Leu
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Glu	Leu	Pro	Asn	Gln	Trp	Leu	Trp	Asp	Ile	Ile	Asp	Glu	Phe	Ile	Tyr
			180					185					190		
Gln	Phe	Gln	Ser	Phe	Ser	Gln	Tyr	Arg	Cys	Lys	Thr	Ala	Lys	Lys	Ser
		195					200					205			
Glu	Glu	Glu	Ile	Asp	Phe	Leu	Arg	Ser	Asn	Pro	Lys	Ile	Trp	Asn	Val
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His	Ser	Val	Leu	Asn	Val	Leu	His	Ser	Leu	Val	Asp	Lys	Ser	Asn	Ile
225					230					235					240
Asn	Arg	Gln	Leu	Glu	Val	Tyr	Thr	Ser	Gly	Gly	Asp	Pro	Glu	Ser	Val
				245					250					255	
Ala	Gly	Glu	Tyr	Gly	Arg	His	Ser	Leu	Tyr	Lys	Met	Leu	Gly	Tyr	Phe
			260				265						270		
Ser	Leu	Val	Gly	Leu	Leu	Arg	Leu	His	Ser	Leu	Leu	Gly	Asp	Tyr	Tyr
		275					280					285			
Gln	Ala	Ile	Lys	Val	Leu	Glu	Asn	Ile	Glu	Leu	Asn	Lys	Lys	Ser	Met
	290					295					300				
Tyr	Ser	Arg	Val	Pro	Glu	Cys	Gln	Val	Thr	Thr	Tyr	Tyr	Tyr	Val	Gly
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<211> 2320
<212> DNA
<213> Homo sapiens
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120
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180
caagtatacc accatcacac agaaatttta ttttttattt tattttttat agagacaggg
240
tctcactaca ttgcctagat tgggtctcaa ctcttgggct caagcaatct tcctcttctt
300
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360
taatgcatgt ggtaatccac aggagatcac atttagtata tgaccaagtt aattaagaag
420
tcaaaaaaca cgttaaattt aagcagaata aggctggggt cggtggctca tgctgtgat
480
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cccagcactt tgggaggcag aggtgggcag atcattnagg ccaggagtgc gagaccagcc  
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aagtttcacc atgttggcct ggctggtctc aaactcctga cctcaagtga tctgccccgc  
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1380  
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1920  
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<210> 5978

<211> 77

<212> PRT

<213> Homo sapiens

<400> 5978

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			20					25					30		
Gly	Arg	Gly	Gly	Gln	Ile	Ile	Xaa	Ala	Arg	Ser	Ser	Arg	Pro	Ala	Trp
		35					40					45			
Thr	Thr	Trp	Arg	Xaa	Val	Phe	Thr	Lys	Asn	Thr	Lys	Ile	Ser	Trp	Ala
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<210> 5979

<211> 1095

<212> DNA

<213> Homo sapiens

<400> 5979

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 180  
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 240  
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 360  
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 660

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<210> 5980

<211> 169

<212> PRT

<213> Homo sapiens

<400> 5980

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			20					25					30		
Ser	Gly	Gln	Glu	Asp	Tyr	Asp	Arg	Leu	Arg	Pro	Leu	Ser	Tyr	Gln	Asn
		35				40					45				
Thr	His	Leu	Val	Leu	Ile	Cys	Tyr	Asp	Val	Met	Asn	Pro	Thr	Ser	Tyr
	50					55					60				
Asp	Asn	Val	Leu	Ile	Lys	Trp	Phe	Pro	Glu	Val	Thr	His	Phe	Cys	Arg
65					70					75					80
Gly	Ile	Pro	Met	Val	Leu	Ile	Gly	Cys	Lys	Thr	Asp	Leu	Arg	Lys	Asp
				85				90						95	
Lys	Glu	Gln	Leu	Arg	Lys	Leu	Arg	Ala	Ala	Gln	Leu	Glu	Pro	Ile	Thr
			100					105						110	
Tyr	Met	Gln	Gly	Leu	Ser	Ala	Cys	Glu	Gln	Ile	Arg	Ala	Ala	Leu	Tyr
		115				120						125			
Leu	Glu	Cys	Ser	Ala	Lys	Phe	Arg	Glu	Asn	Val	Glu	Asp	Val	Phe	Arg
	130					135					140				
Glu	Ala	Ala	Lys	Val	Ala	Leu	Ser	Ala	Leu	Lys	Lys	Ala	Gln	Arg	Gln
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Lys	Lys	Arg	Arg	Leu	Cys	Leu	Leu	Leu							
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<210> 5981

<211> 677

<212> DNA

<213> Homo sapiens

<400> 5981

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 240  
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 420  
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 480  
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 540  
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<210> 5982

<211> 98

<212> PRT

<213> Homo sapiens

<400> 5982

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Arg	Ile	Pro	Lys	Ser	Asp	Asp	Gly	Thr	Arg	Thr	Gly	Arg	Asn	Asp	Ser
			20					25					30		
Pro	Arg	Ala	Pro	Leu	Pro	Arg	Ser	Ser	Ala	Arg	Arg	Pro	Ser	Lys	Ala
		35					40					45			
Asn	Leu	His	Thr	Leu	Gly	Gln	Leu	Lys	Leu	Ser	Arg	Arg	Cys	Arg	Glu
	50					55					60				
Pro	Arg	Leu	Gly	Arg	Ala	Gly	Gln	Gln	Arg	Leu	His	Pro	Arg	Thr	Arg
65					70					75				80	
Pro	Arg	Arg	Gly	Ser	Gly	Pro	Leu	Val	Arg	Ala	Gly	Arg	Arg	Gly	Trp
				85					90					95	

Gly Lys

<210> 5983

<211> 790

<212> DNA

<213> Homo sapiens

<400> 5983

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 120

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 180  
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 240  
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<210> 5984

<211> 186

<212> PRT

<213> Homo sapiens

<400> 5984

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			20					25					30		
Glu	Val	Asn	Arg	Gln	Cys	Pro	Gly	Glu	Lys	Glu	Pro	Val	Ser	Asp	Leu
		35					40					45			
Gln	Leu	Gly	Leu	Asp	Ala	Val	Glu	Pro	Thr	Ala	Leu	His	Lys	Thr	Leu
	50					55					60				
Glu	Thr	Pro	Ala	His	Asp	Arg	Ala	Glu	Pro	Asn	Ser	Gln	Leu	Asp	Ser
65					70					75				80	
Thr	His	Ser	Gly	Arg	Gly	Thr	Met	Tyr	Ser	Ser	Trp	Val	Lys	Ser	Pro
			85					90					95		
Asp	Arg	Thr	Gly	Val	Asn	Phe	Ser	Val	Asn	Ser	Asn	Leu	Arg	Asp	Leu
			100					105					110		
Thr	Pro	Ser	His	Gln	Leu	Glu	Val	Gly	Gly	Gly	Phe	Arg	Ile	Ser	Glu
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180

185

&lt;210&gt; 5985

&lt;211&gt; 737

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5985

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&lt;210&gt; 5986

&lt;211&gt; 165

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5986

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 35 40 45  
 Gln His Val Asp Glu Ser Gly Leu Ser Leu Thr Leu Ala Lys Glu Gln  
 50 55 60  
 Ala Gln Ala Trp Lys Glu Val Arg Leu His Lys Thr Thr Trp Leu Arg  
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 Ser Glu Ile Leu His Arg Val Ile Gln Glu Leu Leu Val Asp Tyr Tyr  
 85 90 95  
 Val Lys Ile Gln Asp Thr Asn Val Thr Ser Glu Asp Lys Lys Phe His

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Glu Thr Leu Glu Gln Arg Leu Leu Val Thr Glu Leu Met Arg Leu Leu					
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Gly Pro Ser Gln Glu Arg Glu Ile Pro Pro Leu Leu Gly Leu Glu Lys					
	130		135		140
Ala Asp Leu Leu Glu Leu Met Pro Leu Ser Glu Val Gly Gly Glu Ile					
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Leu Glu Pro Asn Lys					
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&lt;210&gt; 5987

&lt;211&gt; 1444

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5987

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1140

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<211> 216

<212> PRT

<213> Homo sapiens

<400> 5988

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Thr	Pro	Ser	Glu	Arg	Gly	Met	Thr	Tyr	Asp	Ala	Leu	His	Val	Phe	Asp
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Glu	Thr	Pro	Pro	Asp	Ala	Leu	Ile	Leu	Glu	Ser	Pro	Phe	Thr	Asn	Ile
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		115					120					125			
Lys	Phe	Ala	Asn	Asp	Glu	Asn	Val	Lys	His	Ile	Ser	Cys	Pro	Leu	Leu
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Ile	Leu	His	Ala	Glu	Asp	Asp	Pro	Val	Val	Pro	Phe	Gln	Leu	Gly	Arg
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<212> DNA

<213> Homo sapiens

<400> 5989



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&lt;210&gt; 5990

&lt;211&gt; 260

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5990

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Glu Glu Tyr Val Phe Thr Leu Pro Ser Ala Tyr Ala Arg Ser Ile Leu
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100          105          110
Lys Thr Gly Tyr Ser Ala Thr Val Ile Phe His Thr Lys Pro Phe Tyr
115          120          125
Gly Gly Lys Val His Arg Val Thr Ala Glu Val Lys His Asn Pro Thr
130          135          140
Asn Thr Ile Val Cys Lys Ala His Gly Glu Trp Asn Gly Thr Leu Glu
145          150          155          160
Phe Thr Tyr Asn Asn Gly Glu Thr Lys Val Ile Asp Thr Thr Thr Leu
165          170          175
Pro Val Tyr Pro Lys Lys Ile Arg Pro Leu Glu Lys Gln Gly Pro Met
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Glu Ser Arg Asn Leu Trp Arg Glu Val Thr Arg Tyr Leu Arg Leu Gly
195          200          205
Asp Ile Asp Ala Ala Thr Glu Gln Lys Arg His Leu Glu Glu Lys Gln
210          215          220
Arg Val Glu Glu Arg Lys Arg Glu Asn Leu Arg Thr Pro Trp Lys Pro
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&lt;210&gt; 5991

&lt;211&gt; 2440

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5991

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<211> 301

<212> PRT

<213> Homo sapiens

<400> 5992

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&lt;210&gt; 5993

&lt;211&gt; 7858

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5993

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<212> PRT

<213> Homo sapiens

<400> 6000

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Glu	Gly	Thr	Gln	Ala	Asp	Thr	Arg	Glu	Ser	Asp	Lys	Met	Trp	Leu	Val



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Glu Val Ser Thr Leu Val	Ser Lys Tyr Pro Asp	Ile Arg Asp Asp His
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&lt;211&gt; 2490

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<211> 263

<212> PRT

<213> Homo sapiens

<400> 6002

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<211> 140

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<213> Homo sapiens

<400> 6004

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Ala	Leu	Pro	Xaa	Arg	Gly	Ser	Pro	Arg	Gly	Pro	Gly	Pro	Arg	Ala	Pro
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Pro	Leu	Ser	Ser	Ala	Phe	Gln	Pro	Pro	Ala	Leu	Gly	Pro	Ala	Pro	Lys
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Glu	Gly	Gly	Pro	Ser	Ser	Leu	Asn	Lys	Arg	Cys	Thr				
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&lt;210&gt; 6005

&lt;211&gt; 1735

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6005

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&lt;210&gt; 6006

&lt;211&gt; 200

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6006

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Lys	Gly	Gln	Lys	Gly	Asp	Pro	Gly	Glu	Pro	Gly	Pro	Ala	Gly	Leu	Lys
		20						25				30			
Gly	Glu	Ala	Gly	Glu	Met	Gly	Leu	Ser	Gly	Leu	Pro	Gly	Ala	Asp	Gly
		35					40					45			
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Gly	Pro	Met	Gly	Leu	Gln	Gly	Ile	Gln	Gly	Pro	Lys	Gly	Leu	Asp	Gly
			85					90					95		
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		100						105					110		
Pro	Gly	Pro	Val	Gly	Pro	Pro	Gly	Leu	Ile	Gly	Leu	Pro	Gly	Thr	Lys
		115					120					125			
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	130					135					140				
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Gly	Pro	Pro	Gly	Leu	Asp	Gln	Pro	Cys	Pro	Val	Gly	Pro	Asp	Gly	Leu
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&lt;210&gt; 6007

&lt;211&gt; 693

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens



&lt;400&gt; 6007

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 693

&lt;210&gt; 6008

&lt;211&gt; 214

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6008

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			20					25					30		
Gly	Lys	Met	Val	Lys	Lys	Val	Cys	Pro	Cys	Asn	Gln	Leu	Cys	Arg	Thr
		35					40					45			
Ser	Ser	Thr	Asn	Thr	Val	Gly	Ala	Thr	Val	Asn	Ser	Gln	Ala	Ala	Gln
		50				55					60				
Ala	Gln	Pro	Pro	Ala	Met	Thr	Ser	Ser	Arg	Lys	Gly	Thr	Phe	Thr	Asp
65					70				75					80	
Asp	Leu	His	Lys	Leu	Val	Asp	Asn	Trp	Ala	Arg	Asp	Ala	Met	Asn	Leu
			85					90					95		
Ser	Gly	Arg	Arg	Gly	Ser	Lys	Gly	His	Met	Asn	Tyr	Glu	Gly	Pro	Gly
		100					105					110			
Met	Ala	Arg	Lys	Phe	Ser	Ala	Pro	Gly	Gln	Leu	Cys	Ile	Ser	Met	Thr
		115				120					125				
Ser	Asn	Leu	Gly	Gly	Ser	Ala	Pro	Ile	Ser	Ala	Ala	Ser	Ala	Thr	Ser
	130					135					140				
Leu	Gly	His	Phe	Thr	Lys	Ser	Met	Cys	Pro	Pro	Gln	Gln	Tyr	Gly	Phe
145					150				155					160	
Pro	Ala	Thr	Pro	Phe	Gly	Ala	Gln	Trp	Ser	Gly	Thr	Gly	Gly	Pro	Ala

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<210> 6009

<211> 1570

<212> DNA

<213> Homo sapiens

<400> 6009

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<211> 468

<212> PRT

<213> Homo sapiens

<400> 6010

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			20					25					30		
Asp	Thr	Val	Tyr	Asp	Val	Val	Val	Ser	Gly	Gly	Gly	Leu	Val	Gly	Ala
		35					40					45			
Ala	Met	Ala	Cys	Ala	Leu	Gly	Tyr	Asp	Ile	His	Phe	His	Asp	Lys	Lys
	50					55					60				
Ile	Leu	Leu	Leu	Glu	Ala	Gly	Pro	Lys	Lys	Val	Leu	Glu	Lys	Leu	Ser
65				70						75				80	
Glu	Thr	Tyr	Ser	Asn	Arg	Val	Ser	Ser	Ile	Ser	Pro	Gly	Ser	Ala	Thr
				85					90					95	
Leu	Leu	Ser	Ser	Phe	Gly	Ala	Trp	Asp	His	Ile	Cys	Asn	Met	Arg	Tyr
			100					105					110		
Arg	Ala	Phe	Arg	Arg	Met	Gln	Val	Trp	Asp	Ala	Cys	Ser	Glu	Ala	Leu
		115				120						125			
Ile	Met	Phe	Asp	Lys	Asp	Asn	Leu	Asp	Asp	Met	Gly	Tyr	Ile	Val	Glu
	130					135					140				
Asn	Asp	Val	Ile	Met	His	Ala	Leu	Thr	Lys	Gln	Leu	Glu	Ala	Val	Ser
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Asp	Arg	Val	Thr	Val	Leu	Tyr	Arg	Ser	Lys	Ala	Ile	Arg	Tyr	Thr	Trp
			165						170					175	
Pro	Cys	Pro	Phe	Pro	Met	Ala	Asp	Ser	Ser	Pro	Trp	Val	His	Ile	Thr
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Ile	Ala	Leu	Leu	Pro	Leu	Ser	Asp	Thr	Leu	Ser	Ser	Leu	Val	Trp	Ser

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 325 330 335  
 Trp Val Asp Ala Lys Ser Arg Val Leu Phe Pro Leu Gly Leu Gly His  
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 His Arg Val His Pro Leu Ala Gly Gln Gly Val Asn Met Gly Phe Gly  
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<210> 6011

<211> 1331

<212> DNA

<213> Homo sapiens

<400> 6011

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<210> 6012

<211> 219

<212> PRT

<213> Homo sapiens

<400> 6012

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			20					25					30		
Lys	Glu	Pro	Gly	Asp	Ser	Ala	Gln	Phe	Thr	Lys	Ala	Ile	Ala	Ile	Ile
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Phe	Pro	Phe	Leu	Tyr	Leu	Leu	Glu	Lys	Val	Glu	Cys	Thr	Pro	Ser	Gln
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Glu	His	Leu	Lys	His	Gln	Thr	Val	Tyr	Arg	Leu	Leu	Lys	Cys	Ala	Pro
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			100					105					110		
Val	Val	Lys	Val	Leu	Leu	Asp	Cys	Gly	Ala	Asp	Pro	Asp	Ser	Arg	Asp
			115				120					125			
Phe	Asp	Asn	Asn	Thr	Pro	Leu	His	Ile	Ala	Ala	Gln	Asn	Asn	Cys	Pro
			130			135					140				
Ala	Ile	Met	Asn	Ala	Leu	Ile	Glu	Ala	Gly	Ala	His	Met	Asp	Ala	Thr
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Asn	Ala	Phe	Lys	Lys	Thr	Ala	Tyr	Glu	Leu	Leu	Asp	Glu	Lys	Leu	Leu



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<210> 6014

<211> 182

<212> PRT

<213> Homo sapiens

<400> 6014

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			20					25					30		
Val	Lys	His	Ala	Lys	Val	Tyr	Thr	Cys	Thr	Ile	Cys	Ser	Arg	Ala	Tyr
		35				40					45				
Thr	Ser	Glu	Thr	Tyr	Leu	Met	Lys	His	Met	Arg	Lys	His	Asn	Pro	Pro
		50				55					60				
Asp	Leu	Gln	Gln	Gln	Val	Gln	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Val	Ala
65					70				75					80	
Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala
			85					90					95		
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      130      135      140
Pro Pro Pro Gln Cys Ser Phe Asp Leu Thr Pro Tyr Lys Thr Ala Glu
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His His Lys Asp Ile Cys Leu Thr Val Thr Thr Ser Thr Ile Gln Val
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Glu His Leu Ala Ser Ser
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<210> 6015  
 <211> 612  
 <212> DNA  
 <213> Homo sapiens

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480
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<210> 6016  
 <211> 99  
 <212> PRT  
 <213> Homo sapiens

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20      25      30
Arg Cys Lys Leu Asn Asn Asn Ser Trp Ser Gly Leu Thr Cys Pro Thr
35      40      45
Leu Ser Met Ser Cys Asn Gln Asn Lys Leu Asp Ser Pro Gly Arg Ala

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50		55		60
Ser His Gly Ser Ser Leu Pro Phe Asn Gln Asp	Ser Gln Lys Pro Ala			
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Phe Tyr Asn Ile Phe Leu Lys Lys Ser His Ser	Phe Gln Ser Leu Leu			
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Gln Tyr Ile				

<210> 6017  
 <211> 2091  
 <212> DNA  
 <213> Homo sapiens

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 2091

&lt;210&gt; 6018

&lt;211&gt; 537

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6018

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 Asn Gly Lys Gly Lys Glu Leu Met Trp Asn Phe Arg Glu Leu Ser Glu  
 35 40 45  
 Asn Ser Gln Gln Ala Ala Asn Val Leu Ser Gly Ala Cys Gly Leu Gln  
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 Arg Gly Asp Arg Val Ala Val Met Leu Pro Arg Val Pro Glu Trp Trp  
 65 70 75 80  
 Leu Val Ile Leu Gly Cys Ile Arg Ala Gly Leu Ile Phe Met Pro Gly  
 85 90 95  
 Thr Ile Gln Met Lys Ser Thr Asp Ile Leu Tyr Arg Leu Gln Met Ser  
 100 105 110  
 Lys Ala Lys Ala Ile Val Ala Gly Asp Glu Val Ile Gln Glu Val Asp  
 115 120 125  
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Ala Ser Thr Thr His His Cys Val Glu Thr Gly Ser Gln Glu Ala Ser				
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Ala Ile Tyr Phe Thr Ser Gly Thr Ser Gly Leu Pro Lys Met Ala Glu				
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His Ser Tyr Ser Ser Leu Gly Leu Lys Ala Lys Met Asp Ala Gly Trp				
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Thr Gly Leu Gln Ala Ser Asp Ile Met Trp Thr Ile Ser Asp Thr Gly				
		210		215
Trp Ile Leu Asn Ile Leu Gly Ser Leu Leu Glu Ser Trp Thr Leu Gly				
		225		230
Ala Cys Thr Phe Val His Leu Leu Pro Lys Phe Asp Pro Leu Val Ile				
		245		250
Leu Lys Thr Leu Ser Ser Tyr Pro Ile Lys Ser Met Met Gly Ala Pro				
		260		265
Ile Val Tyr Arg Met Leu Leu Gln Asp Leu Ser Ser Tyr Lys Phe				
		275		280
Pro His Leu Gln Asn Cys Leu Ala Gly Gly Glu Ser Leu Leu Pro Glu				
		290		295
Thr Leu Glu Asn Trp Arg Ala Gln Thr Gly Leu Asp Ile Arg Glu Phe				
		305		310
Tyr Gly Gln Thr Glu Thr Gly Leu Thr Cys Met Val Ser Lys Thr Met				
		325		330
Lys Ile Lys Pro Gly Tyr Met Gly Thr Ala Ala Ser Cys Tyr Asp Val				
		340		345
Gln Val Ile Asp Asp Lys Gly Asn Val Leu Pro Pro Gly Thr Glu Gly				
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Asp Ile Gly Ile Arg Val Lys Pro Ile Arg Pro Ile Gly Ile Phe Ser				
		370		375
Gly Tyr Val Glu Asn Pro Asp Lys Thr Ala Ala Asn Ile Arg Gly Asp				
		385		390
Phe Trp Leu Leu Gly Asp Arg Gly Ile Lys Asp Glu Asp Gly Tyr Phe				
		405		410
Gln Phe Met Gly Arg Ala Asp Asp Ile Ile Asn Ser Ser Gly Tyr Arg				
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Ile Gly Pro Ser Glu Val Glu Asn Ala Leu Met Lys His Pro Ala Val				
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Val Glu Thr Ala Val Ile Ser Ser Pro Asp Pro Val Arg Gly Glu Val				
		450		455
Val Lys Ala Phe Val Val Leu Ala Ser Gln Phe Leu Ser His Asp Pro				
		465		470
Glu Gln Leu Thr Lys Glu Leu Gln Gln His Val Lys Ser Val Thr Ala				
		485		490
Pro Tyr Lys Tyr Pro Arg Lys Ile Glu Phe Val Leu Asn Leu Pro Lys				
		500		505
Thr Val Thr Gly Lys Ile Gln Arg Ala Lys Leu Arg Asp Lys Glu Trp				
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Lys Met Ser Gly Lys Ala Arg Ala Gln				525
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&lt;210&gt; 6019

&lt;211&gt; 3002

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6019

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3002

&lt;210&gt; 6020

&lt;211&gt; 387

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6020

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Thr Gly Arg Asp Leu Ile Ala Tyr Glu Val Lys Ala Asn Gln Arg Asn
 35           40           45
Ile Glu Asp Ile Cys Ile Cys Cys Gly Ser Leu Gln Val His Thr Gln
 50           55           60
His Pro Leu Phe Glu Gly Gly Ile Cys Ala Pro Cys Lys Asp Lys Phe
 65           70           75           80
Leu Asp Ala Leu Phe Leu Tyr Asp Asp Asp Gly Tyr Gln Ser Tyr Cys
 85           90           95
Ser Ile Cys Cys Ser Gly Glu Thr Leu Ile Cys Gly Asn Pro Asp
 100          105          110
Cys Thr Arg Cys Tyr Cys Phe Glu Cys Val Asp Ser Leu Val Gly Pro
 115          120          125
Gly Thr Ser Gly Lys Val His Ala Met Ser Asn Trp Val Cys Tyr Leu
 130          135          140
Cys Leu Pro Ser Ser Arg Ser Gly Leu Leu Gln Arg Arg Arg Lys Trp
 145          150          155          160
Arg Ser Gln Leu Lys Ala Phe Tyr Asp Arg Glu Ser Glu Asn Pro Leu
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Glu Met Phe Glu Thr Val Pro Val Trp Arg Arg Gln Pro Val Arg Val
 180          185          190
Leu Ser Leu Phe Glu Asp Ile Lys Lys Glu Leu Thr Ser Leu Gly Phe
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Leu Glu Ser Gly Ser Asp Pro Gly Gln Leu Lys His Val Val Asp Val
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Thr Asp Thr Val Arg Lys Asp Val Glu Glu Trp Gly Pro Phe Asp Leu
 225          230          235          240
Val Tyr Gly Ala Thr Ala Pro Leu Gly His Thr Cys Asp Arg Pro Pro
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Ser Trp Tyr Leu Phe Gln Phe His Arg Phe Leu Gln Tyr Ala Arg Pro
 260          265          270
Lys Pro Gly Ser Pro Arg Pro Phe Phe Trp Met Phe Val Asp Asn Leu
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Val Leu Asn Lys Glu Asp Leu Asp Val Ala Ser Arg Phe Leu Glu Met
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 305          310          315          320
Val Arg Val Trp Ser Asn Ile Pro Ala Ile Arg Ser Ser Arg His Trp
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Ala Leu Val Ser Glu Glu Leu Ser Leu Leu Ala Gln Asn Lys Gln
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Ser Ser Lys Leu Ala Ala Lys Trp Pro Thr Lys Leu Val Lys Asn Cys
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Ser Ser Leu

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385

&lt;210&gt; 6021

&lt;211&gt; 3145

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6021

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<212> DNA

<213> Homo sapiens

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&lt;213&gt; Homo sapiens

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<212> PRT

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Trp	Asn	Thr	Leu	Thr	Gly	Gln	Pro	Leu	Gln	Cys	Ile	Asp	Thr	Gly	Ser
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Gln	Val	Cys	Asn	Leu	Ala	Trp	Ser	Lys	His	Ala	Asn	Glu	Leu	Val	Ser
			405					410					415		
Thr	His	Gly	Tyr	Ser	Gln	Asn	Gln	Ile	Leu	Val	Trp	Lys	Tyr	Pro	Ser
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Leu	Thr	Gln	Val	Ala	Lys	Leu	Thr	Gly	His	Ser	Tyr	Arg	Val	Leu	Tyr



	435					440					445					
Leu	Ala	Met	Ser	Pro	Asp	Gly	Glu	Ala	Ile	Val	Thr	Gly	Ala	Gly	Asp	
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<212> DNA
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120
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<213> Homo sapiens

<400> 6030

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His	Thr	Gly	Thr	Ser	His	Pro	Pro	Arg	Phe	Gly	Leu	Ala	Glu	Thr	Ser

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Ser Gln Glu Glu Phe Leu Asp Gly Val Leu Met Ser Ala Glu Asn Ser		
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&lt;211&gt; 1316

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6031

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Ala	Phe	Leu	Ser	Ala	Ile	Phe	Leu	Ala	Leu	Ala	Thr	Tyr	Gln	Ser	Leu
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Tyr	Pro	Leu	Thr	Leu	Phe	Val	Pro	Gly	Leu	Leu	Tyr	Leu	Leu	Gln	Arg
			85					90						95	
Gln	Tyr	Ile	Pro	Val	Lys	Met	Lys	Ser	Lys	Ala	Phe	Trp	Ile	Phe	Ser
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Trp	Glu	Tyr	Ala	Met	Met	Tyr	Val	Gly	Ser	Leu	Val	Val	Ile	Ile	Cys
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			165					170						175	
Cys	Val	Phe	Gln	Ile	Asn	Val	Phe	Phe	Tyr	Thr	Ile	Pro	Leu	Ala	Ile
			180				185						190		
Lys	Leu	Lys	Glu	His	Pro	Ile	Phe	Phe	Met	Phe	Ile	Gln	Ile	Ala	Val
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225				230						235				240	
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			245						250					255	
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		260						265					270		
Phe	Tyr	Ala	Ile	Thr	Leu	Thr	Phe	Asn	Val	Gly	Gln	Ile	Leu	Leu	Ile
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Ser	Asp	Tyr	Phe	Tyr	Ala	Phe	Leu	Arg	Arg	Glu	Tyr	Tyr	Leu	Thr	His
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<212> PRT

<213> Homo sapiens

<400> 6034

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		355					360					365			
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Asn	Tyr	Glu	Ala	Met	Ile	Asp	Arg	Ala	His	Gly	Gly	Pro	Asn	Phe	Met
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 <213> Homo sapiens

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<210> 6036  
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<400> 6036  
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<211> 214

<212> PRT

<213> Homo sapiens

<400> 6038

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Gly	Tyr	Val	His	Pro	Asp	Leu	Leu	Lys	Asp	Phe	Cys	Met	Asn	Pro	Gln
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Thr	Val	Leu	Leu	Leu	Arg	Val	Ile	Ala	Ala	Phe	Cys	Phe	Leu	Gly	Ile
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Pro	Ala	Leu	Lys	Ile	Thr	Arg	Arg	Tyr	Ala	Phe	Ala	His	Ile	Leu	Thr
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Val	Leu	Gln	Cys	Ala	Thr	Val	Ile	Gly	Phe	Ser	Tyr	Trp	Ala	Ser	Glu
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Leu	Ile	Leu	Ala	Gln	Gln	Gln	Gln	His	Lys	Lys	Tyr	His	Gly	Ser	Gln
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Gly	Ala	Ser	Ile	Leu	Ala	Thr	Ala	Ala	Asn	Leu	Leu	Arg	His	Tyr	Pro
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Thr	Glu	Glu	Glu	Glu	Gln	Ala	Leu	Glu	Leu	Leu	Ser	Glu	Met	Glu	Glu
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Arg Gln Leu	Glu Leu Gly Ala	Glu His Ala Leu	Leu Leu Asp	Ala Ala	
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Gly Gln Val	Phe Ser Trp Gly	Gly Gly Arg His	Gly Gln Leu	Gly His	
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Gly Thr Leu	Glu Ala Glu Leu	Glu Pro Arg Leu	Leu Glu Ala	Leu Gln	
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Thr Gly Gly	Ala Glu Asp Gly	Ala Pro Ala	Pro Phe Ile	Ala Val Gln	
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Pro Phe Pro	Ala Leu Leu Asp	Leu Pro Met	Gly Ser Asp	Ala Val Lys	
225	230	235	240		
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&lt;210&gt; 6041

&lt;211&gt; 291

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6041

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      35              40              45
Pro Pro Gly Thr Leu Asn Pro Cys Pro Glu Arg Gly Gly Ala Gly Val
      50              55              60
Trp Ile Pro Ala Gly Ser Phe Gly Thr Gly Lys Asn Arg Gly Cys Ser
65              70              75              80
Asp Arg Val Phe Thr Lys Thr Cys Ile Arg Gln Asp Pro Gly Arg Met
      85              90              95
Trp Val Ala Pro Pro Leu Cys Trp Ala Arg Arg Met Cys Pro His Arg
      100              105              110
Ser Gln Ile Leu Phe Pro Gln Trp Val Val Gln Asp Thr Leu Asn Phe
      115              120              125
Cys Met Asn Trp Asp Ile Gln Asn Ser Leu Glu Gln Pro Pro Pro Ser
      130              135              140
Thr Leu Cys Leu Asp Ile Ser Tyr
145              150

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&lt;210&gt; 6045

&lt;211&gt; 1916

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6045

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480
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780

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 1916

&lt;210&gt; 6046

&lt;211&gt; 457

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6046

Thr	Arg	Val	Glu	Thr	His	Phe	Gln	Pro	Arg	Gly	Ala	Gly	Glu	Gly	Gly
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Pro	Tyr	Gly	Cys	Lys	Asp	Ala	Leu	Arg	Gln	Gln	Leu	Arg	Ser	Ala	Arg
			20					25					30		
Glu	Val	Ile	Ala	Val	Val	Met	Asp	Val	Phe	Thr	Asp	Ile	Asp	Ile	Phe
			35				40					45			
Arg	Asp	Leu	Gln	Glu	Ile	Cys	Arg	Lys	Gln	Gly	Val	Ala	Val	Tyr	Ile
	50					55					60				
Leu	Leu	Asp	Gln	Ala	Leu	Leu	Ser	Gln	Phe	Leu	Asp	Met	Cys	Met	Asp

65					70					75					80
Leu	Lys	Val	His	Pro	Glu	Gln	Glu	Lys	Leu	Met	Thr	Val	Arg	Thr	Ile
				85					90					95	
Thr	Gly	Asn	Ile	Tyr	Tyr	Ala	Arg	Ser	Gly	Thr	Lys	Ile	Ile	Gly	Lys
			100					105					110		
Val	His	Glu	Lys	Phe	Thr	Leu	Ile	Asp	Gly	Ile	Arg	Val	Ala	Thr	Gly
		115					120					125			
Ser	Tyr	Ser	Phe	Thr	Trp	Thr	Asp	Gly	Lys	Leu	Asn	Ser	Ser	Asn	Leu
	130					135					140				
Val	Ile	Leu	Ser	Gly	Gln	Val	Val	Glu	His	Phe	Asp	Leu	Glu	Phe	Arg
145					150					155					160
Ile	Leu	Tyr	Ala	Gln	Ser	Lys	Pro	Ile	Ser	Pro	Lys	Leu	Leu	Ser	His
				165					170					175	
Phe	Gln	Ser	Ser	Asn	Lys	Phe	Asp	His	Leu	Thr	Asn	Arg	Lys	Pro	Gln
			180					185				190			
Ser	Lys	Glu	Leu	Thr	Leu	Gly	Asn	Leu	Leu	Arg	Met	Arg	Leu	Ala	Arg
		195					200					205			
Leu	Ser	Ser	Thr	Pro	Arg	Lys	Ala	Asp	Leu	Asp	Pro	Glu	Met	Pro	Ala
	210					215					220				
Glu	Gly	Lys	Ala	Glu	Arg	Lys	Pro	His	Asp	Cys	Glu	Ser	Ser	Thr	Val
225					230					235					240
Ser	Glu	Glu	Asp	Tyr	Phe	Ser	Ser	His	Arg	Asp	Glu	Leu	Gln	Ser	Arg
			245						250					255	
Lys	Ala	Ile	Asp	Ala	Ala	Thr	Gln	Thr	Glu	Pro	Gly	Glu	Glu	Met	Pro
			260					265					270		
Gly	Leu	Ser	Val	Ser	Glu	Val	Gly	Thr	Gln	Thr	Ser	Ile	Thr	Thr	Ala
	275						280					285			
Cys	Ala	Gly	Thr	Gln	Thr	Ala	Val	Ile	Thr	Arg	Ile	Ala	Ser	Ser	Gln
	290					295					300				
Thr	Thr	Ile	Trp	Ser	Arg	Ser	Thr	Thr	Thr	Gln	Thr	Asp	Met	Asp	Glu
305					310					315					320
Asn	Ile	Leu	Phe	Pro	Arg	Gly	Thr	Gln	Ser	Thr	Glu	Gly	Ser	Pro	Val
				325					330					335	
Ser	Lys	Met	Ser	Val	Ser	Arg	Ser	Ser	Ser	Leu	Lys	Ser	Ser	Ser	Ser
			340					345					350		
Val	Ser	Ser	Gln	Gly	Ser	Val	Ala	Ser	Ser	Thr	Gly	Ser	Pro	Ala	Ser
		355					360					365			
Ile	Arg	Thr	Thr	Asp	Phe	His	Asn	Pro	Gly	Tyr	Pro	Lys	Tyr	Leu	Gly
	370					375					380				
Thr	Pro	His	Leu	Glu	Leu	Tyr	Leu	Ser	Asp	Ser	Leu	Arg	Asn	Leu	Asn
385					390					395					400
Lys	Glu	Arg	Gln	Phe	His	Phe	Ala	Gly	Ile	Arg	Ser	Arg	Leu	Asn	His
				405					410					415	
Met	Leu	Ala	Met	Leu	Ser	Arg	Arg	Thr	Leu	Phe	Thr	Glu	Asn	His	Leu
			420					425				430			
Gly	Leu	His	Ser	Gly	Asn	Phe	Ser	Arg	Val	Asn	Leu	Leu	Ala	Val	Arg
		435					440					445			
Asp	Val	Ala	Leu	Tyr	Pro	Ser	Tyr	Gln							
	450					455									

&lt;210&gt; 6047

&lt;211&gt; 773

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6047

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 773

&lt;210&gt; 6048

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6048

Met Val Lys Arg Val Ser Glu Met Ser Asp Lys Lys Gln Leu Arg Ser  
 1 5 10 15  
 Arg Ser Cys Arg Pro Pro Gly Ser Ser Gly Ser Pro Ser Ser Thr  
 20 25 30  
 Gly Thr Thr Leu Glu Lys Ser Cys Leu His His Cys Ser Gly Gly Gly  
 35 40 45  
 His Leu Pro Ser Ala Cys Leu Gly Ala Arg Arg Ser Ser Ser Leu Leu  
 50 55 60  
 Gly Tyr Gly Ser Cys Arg Asp Thr Gln Ser Trp Thr Pro Asp Pro Leu  
 65 70 75 80  
 Pro His Pro Pro Ser Leu Ser Pro Gln Ser Leu Leu Tyr Ser Gln Ala  
 85 90 95  
 Met Arg Ser Pro Ile Ser His Gln Glu Leu Thr Arg Pro Leu Gly Lys  
 100 105 110  
 Glu Ala Ala Arg Arg Arg Cys Gly His Thr Val Ala Leu Ser Ala Arg  
 115 120 125  
 Asp

<210> 6049  
 <211> 479  
 <212> DNA  
 <213> Homo sapiens

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 120  
 agcagcagta gcagcagtaa cagtagtaac gagagagaag actttgattc cacctcttcc  
 180  
 tcctcttcca ctctctcttt acaaccaggg gattcggcat ccccttcaac ctctctcttc  
 240  
 tgcttggggg tttcagtggc tgcttccagc cacgtaccga tacagaagaa gctgcgtttt  
 300  
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 360  
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 420  
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 479

<210> 6050  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<400> 6050  
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 20 25 30  
 Ala Lys Lys Arg Lys Leu Asn Ser Ser Ser Ser Ser Ser Ser Asn Ser  
 35 40 45  
 Ser Asn Glu Arg Glu Asp Phe Asp Ser Thr Ser Ser Ser Ser Ser Thr  
 50 55 60  
 Pro Pro Leu Gln Pro Arg Asp Ser Ala Ser Pro Ser Thr Ser Ser Phe  
 65 70 75 80  
 Cys Leu Gly Val Ser Val Ala Ala Ser Ser His Val Pro Ile Gln Lys  
 85 90 95  
 Lys Leu Arg Phe Glu Asp Thr Leu Glu Phe Val Gly Phe Asp Ala Lys  
 100 105 110  
 Met Ala Glu Glu Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Pro Thr Ala  
 115 120 125  
 Ala Thr Ser Gln Glu Gln Gln Leu Lys Asn Lys Ser Ile Leu Ile Ser  
 130 135 140  
 Ser Val Gly Ser Val His His Ala Asp Gly Leu Ala Glu Ser Ser  
 145 150 155

<210> 6051  
 <211> 2404  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 6051

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 120  
 ttacagcagc gtcgatttaa tggctcagac ggagggggtt catggctctcc tatggatgat  
 180  
 gaacttcttg cacagccaca ggttatgaaa ttattagatt cactccgaga gcaatatacc  
 240  
 cgctaccagg aagtttgtag gcaacgtagc aagcgcacac agttagaaga gattcaacag  
 300  
 aaggtaatgc aggtggtgaa ctggctagaa gggcctggat cagaacaact aagagcccag  
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 1860  
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 1920  
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 1980  
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<210> 6052

<211> 518

<212> PRT

<213> Homo sapiens

<400> 6052

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			20					25					30		
Thr	Gly	His	Glu	Leu	Leu	Ser	Glu	Leu	Gln	Gln	Arg	Arg	Phe	Asn	Gly
		35					40					45			
Ser	Asp	Gly	Gly	Val	Ser	Trp	Ser	Pro	Met	Asp	Asp	Glu	Leu	Leu	Ala
	50					55				60					
Gln	Pro	Gln	Val	Met	Lys	Leu	Leu	Asp	Ser	Leu	Arg	Glu	Gln	Tyr	Thr
65					70					75				80	
Arg	Tyr	Gln	Glu	Val	Cys	Arg	Gln	Arg	Ser	Lys	Arg	Thr	Gln	Leu	Glu
				85					90					95	
Glu	Ile	Gln	Gln	Lys	Val	Met	Gln	Val	Val	Asn	Trp	Leu	Glu	Gly	Pro
			100					105					110		
Gly	Ser	Glu	Gln	Leu	Arg	Ala	Gln	Trp	Gly	Ile	Gly	Asp	Ser	Ile	Arg
		115					120					125			
Ala	Ser	Gln	Ala	Leu	Gln	Gln	Lys	His	Glu	Glu	Ile	Glu	Ser	Gln	His



130		135		140
Ser Glu Trp Phe Ala Val Tyr Val Glu Leu Asn Gln Gln Ile Ala Ala				
145		150		155
Leu Leu Asn Ala Gly Asp Glu Glu Asp Leu Val Glu Leu Lys Ser Leu				160
	165		170	175
Gln Gln Gln Leu Ser Asp Val Cys Tyr Arg Gln Ala Ser Gln Leu Glu				
	180		185	190
Phe Arg Gln Asn Leu Leu Gln Ala Ala Leu Glu Phe His Gly Val Ala				
	195	200		205
Gln Asp Leu Ser Gln Gln Leu Asp Gly Leu Leu Gly Met Leu Cys Val				
	210	215		220
Asp Val Ala Pro Ala Asp Gly Ala Ser Ile Gln Gln Thr Leu Lys Leu				
225		230		235
Leu Glu Glu Lys Leu Lys Ser Val Asp Val Gly Leu Gln Gly Leu Arg				240
	245		250	255
Glu Lys Gly Gln Gly Leu Leu Asp Gln Ile Ser Asn Gln Ala Ser Xaa				
	260		265	270
Gly Pro Met Glu Arg Met Xaa Thr Ile Glu Asn Lys Glu Asn Val Asp				
	275	280		285
His Ile Gln Gly Val Met Glu Asp Met Gln Leu Arg Lys Gln Arg Cys				
	290	295		300
Glu Asp Met Val Asp Val Arg Arg Leu Lys Met Leu Gln Met Val Gln				
305		310		315
Leu Phe Lys Cys Glu Asp Ala Ala Lys Ala Val Glu Trp Leu Ser				
	325		330	335
Glu Leu Leu Asp Ala Leu Leu Lys Thr His Ile Arg Leu Gly Asp Asp				
	340		345	350
Ala Gln Glu Thr Lys Val Leu Leu Glu Lys His Arg Lys Phe Val Asp				
	355		360	365
Val Ala Gln Ser Thr Tyr Asp Tyr Gly Arg Gln Leu Leu Gln Ala Thr				
	370	375		380
Val Val Leu Cys Gln Ser Leu Arg Cys Thr Ser Arg Ser Ser Gly Asp				
385		390		395
Thr Leu Pro Arg Leu Asn Arg Val Trp Lys Gln Phe Thr Ile Ala Ser				
	405		410	415
Glu Glu Arg Val His Arg Leu Glu Met Ala Ile Ala Phe His Ser Asn				
	420		425	430
Ala Glu Lys Ile Leu Gln Asp Cys Pro Glu Glu Pro Glu Ala Ile Asn				
	435		440	445
Asp Glu Glu Gln Phe Asp Glu Ile Glu Ala Val Gly Lys Ser Leu Leu				
	450		455	460
Asp Arg Leu Thr Val Pro Val Val Tyr Pro Asp Gly Thr Glu Gln Tyr				
465		470		475
Phe Gly Ser Pro Ser Asp Met Ala Ser Thr Ala Glu Asn Ile Arg Asp				
	485		490	495
Arg Met Lys Leu Val Asn Leu Lys Arg Gln Gln Leu Arg His Pro Glu				
	500		505	510
Met Val Thr Thr Glu Ser				
	515			

&lt;210&gt; 6053

&lt;211&gt; 3257

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6053

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180  
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240  
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300  
tcgtgtaatc gcaaaaccca ttttgaggca ggaattccaa tcatgtctgt gatgggtggtg  
360  
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420  
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960  
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<212> PRT

<213> Homo sapiens

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<212> DNA
<213> Homo sapiens
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225             230             235             240
Ser Ala Thr Gly Thr Leu Val Lys Ser His Leu Ile Ala Asn Ala Asp
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&lt;210&gt; 6057

&lt;211&gt; 3924

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6057

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&lt;210&gt; 6058

&lt;211&gt; 500

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6058

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Arg Thr Asp Lys Lys Ser Glu Phe Leu Lys Ala Leu Lys Arg Asp Arg
 325         330         335
Val Glu Glu Glu His Glu Asp Glu Ser Arg Ala Gly Ser Glu Lys Asp
 340         345         350
Asp Asp Ser Phe Asn Leu His Asn Ser Asn Ser Thr His Gln Glu Arg
 355         360         365
Asp Ile Asn Arg Asn Phe Asp Glu Asn Glu Ile Pro Gln Glu Asn Gly
 370         375         380
Asn Ala Ser Val Ile Ser Gln Gln Ile Ile Arg Ser Ser Thr Phe Pro
 385         390         395         400
Gln Thr Asp Val Leu Ser Ser Ser Leu Glu Ala Glu His Arg Leu Leu
 405         410         415
Lys Glu Met Gly Trp Gln Glu Asp Ser Glu Asn Asp Glu Thr Cys Ala

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Thr	Thr	Glu	Asn	Asp	Asp	Thr	Glu	Thr	Ser	Ser	Ser	Asp	Thr	Ser	Asp
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&lt;210&gt; 6059

&lt;211&gt; 1442

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6059

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<210> 6060

<211> 313

<212> PRT

<213> Homo sapiens

<400> 6060

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			20					25					30		
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Cys	Ile	Leu	Asp	Pro	Lys	Leu	His	Thr	Pro	Met	Tyr	Phe	Phe	Leu	Thr
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Asn	Leu	Ser	Ile	Leu	Asp	Leu	Cys	Tyr	Thr	Thr	Thr	Thr	Val	Pro	His
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		115					120					125			
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Lys	Pro	Ile	Glu	Ala	Glu	Leu	Phe	Phe	Phe	Ser	Val	Leu	Ile	Leu	Leu
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<212> DNA
<213> Homo sapiens
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<212> PRT

<213> Homo sapiens

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			20					25					30		
Arg	Pro	Arg	Asp	Leu	Leu	Gln	Arg	Tyr	Asp	Ser	Lys	Pro	Ile	Val	Asp
			35				40					45			
Leu	Ile	Gly	Ala	Met	Glu	Thr	Gln	Ser	Glu	Pro	Ser	Glu	Leu	Glu	Leu
			50				55				60				
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65					70					75				80	
Glu	Asp	Trp	Ile	Glu	Asp	Ala	Ser	Gly	Leu	Met	Ser	His	Cys	Ile	Ala
				85					90					95	
Ile	Leu	Lys	Ile	Cys	His	Thr	Leu	Thr	Glu	Lys	Leu	Val	Ala	Met	Thr
				100				105					110		
Met	Gly	Ser	Gly	Ala	Lys	Met	Lys	Thr	Ser	Ala	Ser	Val	Ser	Asp	Ile
			115				120					125			
Ile	Val	Val	Ala	Lys	Arg	Ile	Ser	Pro	Arg	Val	Asp	Asp	Val	Val	Lys
			130				135				140				
Ser	Met	Tyr	Pro	Pro	Leu	Asp	Pro	Lys	Leu	Leu	Asp	Ala	Arg	Thr	Thr
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				165					170					175	
Cys	His	Leu	Thr	Gly	Gly	Leu	Asp	Trp	Ile	Asp	Gln	Ser	Leu	Ser	Ala
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			195				200					205			
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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6063

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<212> PRT

<213> Homo sapiens

<400> 6064

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Glu	Glu	Tyr	Thr	Thr	Gly	Met	Ala	Asp	Cys	Ile	Leu	Val	Asn	Ser	Gln
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&lt;210&gt; 6065

&lt;211&gt; 2084

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6065

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<211> 80

<212> PRT

<213> Homo sapiens

<400> 6066

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<210> 6067

<211> 406

<212> DNA

<213> Homo sapiens

<400> 6067

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<210> 6068

<211> 117

<212> PRT

<213> Homo sapiens

<400> 6068

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 35           40           45
Ser Arg Ser Ser Glu Pro Pro Ala Cys Pro Arg His Trp Pro Cys Pro
 50           55           60
Pro Gly Leu Pro Phe Gly Gln Gly Ala Val Ala Arg Ala Ala Pro Cys
 65           70           75           80
Pro Ala Tyr Ser His Ser Ala Val Gly Arg Pro Pro Leu Pro Arg Lys
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<211> 456

<212> DNA

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180
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<212> PRT

<213> Homo sapiens

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			20					25					30		
His	Arg	Tyr	His	Arg	Lys	Glu	Asn	Leu	Glu	Tyr	Cys	Ile	Met	Val	Ile
		35					40					45			
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	50					55					60				
Gln	His	Leu	Arg	Lys	Gly	Lys	Ala	Thr	Arg	Val	Gly	Gly	Glu	Pro	Gly
65					70				75					80	
Ile	Thr	Arg	Ala	Val	Met	Ser	Lys	Ile	Gln	Val	Glu	Ser	Ser	Gly	Ala
				85					90					95	
Arg	Pro	Ser	Thr	Leu	Ser	Arg	Ala	Leu	Gln	Ala	Ser	Gly	Thr	Cys	Arg
			100					105					110		
Pro	Leu	Cys	Gly	Phe	Arg	Leu	Leu	Thr	Thr	Leu	Pro	Ser	Pro	Pro	Leu
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<211> 2633

<212> DNA

<213> Homo sapiens

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Ala	Pro	Thr	Gly	Pro	Phe	Ser	Pro	Arg	Met	Lys	Pro	Ala	Gly	Ser	Val
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<212> DNA

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<211> 601

<212> PRT

<213> Homo sapiens

<400> 6076

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Glu	Val	Gly	Leu	Ala	Leu	Lys	Asp	Leu	Ala	Lys	Gln	Tyr	Ser	Asp	Arg
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Gly	Ile	Ala	Thr	Ile	Glu	Val	Phe	Leu	Pro	Pro	Arg	Leu	Lys	Lys	Asp
			85					90					95		
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Lys	Lys	Leu	Asn	Leu	Ala	Gln	Lys	Cys	Phe	Lys	Asn	Cys	Tyr	Gly	Glu
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Asn	His	Gln	Arg	Leu	Val	His	Ile	Lys	Gly	Asn	Cys	Gly	Lys	Glu	Lys
				325					330					335	
Val	Leu	Phe	Leu	Arg	Leu	Tyr	Leu	Leu	Gln	Gly	Ile	Arg	Asn	Tyr	His
		340						345					350		
Ser	Gly	Asn	Asp	Val	Glu	Ala	Tyr	Glu	Tyr	Leu	Asn	Arg	His	Val	Ser
		355					360					365			
Ser	Leu	Lys	Ser	Tyr	Ile	Leu	Ile	His	Gln	Lys	Trp	Thr	Ile	Cys	Cys
	370					375					380				
Ser	Trp	Gly	Leu	Leu	Pro	Arg	Lys	Xaa	Arg	Leu	Gly	Leu	Arg	Ala	Cys
385				390						395				400	
Asp	Gly	Asn	Val	Asp	His	Ala	Ala	Thr	His	Ile	Thr	Asn	Arg	Arg	Glu
				405					410					415	
Glu	Leu	Ala	Gln	Ile	Arg	Lys	Glu	Glu	Lys	Glu	Lys	Lys	Arg	Arg	Arg
			420					425					430		
Leu	Glu	Asn	Ile	Arg	Phe	Leu	Lys	Gly	Met	Gly	Tyr	Ser	Thr	His	Ala
		435					440						445		
Ala	Gln	Gln	Ile	Leu	Leu	Ser	Asn	Pro	Gln	Met	Trp	Trp	Leu	Asn	Asp
		450				455					460				
Ser	Asn	Pro	Glu	Thr	Asp	Asn	Arg	Gln	Glu	Ser	Pro	Ser	Gln	Glu	Asn
465					470					475				480	
Ile	Asp	Arg	Leu	Val	Tyr	Met	Gly	Phe	Asp	Ala	Leu	Val	Ala	Glu	Ala
				485					490					495	
Ala	Leu	Arg	Val	Phe	Arg	Gly	Asn	Val	Gln	Leu	Ala	Ala	Gln	Thr	Leu
			500					505					510		
Ala	His	Asn	Gly	Gly	Ser	Leu	Pro	Pro	Glu	Leu	Pro	Leu	Ser	Pro	Glu
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Asp	Ser	Leu	Ser	Pro	Pro	Ala	Thr	Ser	Pro	Ser	Asp	Ser	Ala	Gly	Thr
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Ser	Ser	Ala	Ser	Thr	Asp	Glu	Asp	Met	Glu	Thr	Glu	Ala	Val	Asn	Glu
545					550					555				560	
Ile	Leu	Glu	Asp	Ile	Pro	Glu	His	Glu	Glu	Asp	Tyr	Leu	Asp	Ser	Thr
				565					570					575	
Leu	Glu	Asp	Glu	Glu	Ile	Ile	Ile	Ala	Glu	Tyr	Leu	Ser	Tyr	Val	Glu
			580					585					590		
Asn	Arg	Lys	Ser	Ala	Thr	Lys	Lys	Asn							

595

600

&lt;210&gt; 6077

&lt;211&gt; 2093

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6077

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180  
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1320  
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1380

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 1980  
 gaacctgtgc ctaatacacg caagggcgct gtcccgccca accccgcctt taaacgccac  
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 2093

<210> 6078

<211> 213

<212> PRT

<213> Homo sapiens

<400> 6078

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			20					25					30		
Ser	Gly	Arg	Glu	Gly	Ala	Ser	Gly	Pro	Gly	Val	Gly	Pro	His	Ile	Tyr
			35				40					45			
Val	Arg	Glu	Ala	Glu	Asp	Arg	Glu	Leu	Val	Thr	Met	Ala	Gly	Pro	Gln
			50			55				60					
Pro	Leu	Ala	Leu	Gln	Leu	Glu	Gln	Leu	Leu	Asn	Pro	Arg	Pro	Ser	Glu
65				70				75						80	
Ala	Asp	Pro	Glu	Ala	Asp	Pro	Glu	Glu	Ala	Thr	Ala	Ala	Arg	Val	Ile
			85					90					95		
Asp	Arg	Phe	Asp	Glu	Gly	Glu	Asp	Gly	Glu	Gly	Asp	Phe	Leu	Val	Val
			100					105					110		
Gly	Ser	Ile	Arg	Lys	Leu	Ala	Ser	Ala	Ser	Leu	Leu	Asp	Thr	Asp	Lys
			115				120					125			
Arg	Tyr	Cys	Gly	Lys	Thr	Thr	Ser	Arg	Lys	Ala	Trp	Asn	Glu	Asp	His
			130			135					140				
Trp	Glu	Gln	Thr	Leu	Pro	Gly	Ser	Ser	Asp	Glu	Glu	Ile	Ser	Asp	Glu
145				150						155				160	
Glu	Gly	Ser	Gly	Asp	Glu	Asp	Ser	Glu	Gly	Leu	Gly	Leu	Glu	Glu	Tyr
			165					170					175		
Asp	Glu	Asp	Asp	Leu	Gly	Ala	Ala	Glu	Glu	Gln	Glu	Cys	Gly	Asp	Gln

			180						185						190			
Gly	Glu	Gln	Glu	Asp	Glu	Lys	Pro	Leu	Cys	Lys	Asn	Thr	Gly	Leu	Gln			
		195					200						205					
Cys	Pro	Glu	Tyr	Gln														
	210																	

&lt;210&gt; 6079

&lt;211&gt; 651

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6079

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120
catgcgcagc ggggccgtgg gtgtacgcgg cgcagcgcgg cagtcctgat ggcccggcat
180
gggttaccgc tgctgccctt gctgtcgctc ctggtcggcg cgtgggtcaa gctaggaaat
240
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300
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360
gacatatttc ctgtcaccaa caaagatttc agggattttg tcaggagaaa aaagtatcgg
420
acagaagctg agatgttttg atggagcttt gtctttgagg actttgtctc tgatgagctg
480
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540
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600
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651

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&lt;210&gt; 6080

&lt;211&gt; 162

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6080

Leu	Met	Ala	Arg	His	Gly	Leu	Pro	Leu	Leu	Pro	Leu	Leu	Ser	Leu	Leu			
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Val	Gly	Ala	Trp	Leu	Lys	Leu	Gly	Asn	Gly	Gln	Ala	Thr	Ser	Met	Val			
		20					25					30						
Gln	Leu	Gln	Gly	Gly	Arg	Phe	Leu	Met	Gly	Thr	Asn	Ser	Pro	Asp	Ser			
		35				40					45							
Arg	Asp	Gly	Glu	Gly	Pro	Val	Arg	Glu	Ala	Thr	Val	Lys	Pro	Phe	Ala			
	50				55				60									
Ile	Asp	Ile	Phe	Pro	Val	Thr	Asn	Lys	Asp	Phe	Arg	Asp	Phe	Val	Arg			
65				70				75					80					
Glu	Lys	Lys	Tyr	Arg	Thr	Glu	Ala	Glu	Met	Phe	Gly	Trp	Ser	Phe	Val			
		85				90						95						
Phe	Glu	Asp	Phe	Val	Ser	Asp	Glu	Leu	Arg	Asn	Lys	Ala	Thr	Gln	Pro			

			100					105					110				
Met	Lys	Ser	Val	Leu	Trp	Trp	Leu	Pro	Val	Glu	Lys	Ala	Phe	Trp	Arg		
		115					120					125					
Gln	Pro	Ala	Gly	Pro	Gly	Ser	Gly	Ile	Arg	Glu	Arg	Leu	Glu	His	Pro		
	130					135					140						
Val	Leu	His	Val	Ser	Trp	Asn	Asp	Ala	Arg	Ala	Tyr	Cys	Ala	Trp	Arg		
145					150					155					160		
Gly	Lys																

&lt;210&gt; 6081

&lt;211&gt; 655

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6081

```

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120
ggaccagctg ttataacatt gttactagat gaatgtccat tgcccactaa agatgcactc
180
cagaaattga ctgaaattct caatttaaag ggagaagtag cttgccagga ctcaagccat
240
cctgccaaac acaggaacac atctgcagtc ctaggctgct tggccgagaa actagcaggt
300
cctgcaagta taggtttact tagcccagga atactggaat acttgctaca gtgtctgaag
360
ttacagtccc accccacagt catgcttttt gcacttatcg cactggaaaa gtttgcacag
420
acaagtgaaa ataaattgac tatttctgaa tccagtatta gtgaccggct tgtcacattg
480
gagtcctggg ctaatgatcc tgattatctg aaacgtcaag ttggtttctg tgcccagtgg
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600
agtagcatta gggccatgct gaatagcaat gatgtcagcg agtacctgaa gatct
655

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&lt;210&gt; 6082

&lt;211&gt; 218

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6082

Asp	Asn	Asp	Gln	Glu	Pro	Pro	Tyr	Ser	Met	Ile	Thr	Leu	His	Glu	Met		
1				5				10						15			
Ala	Glu	Thr	Asp	Glu	Gly	Trp	Leu	Asp	Val	Val	Gln	Ser	Leu	Ile	Arg		
			20					25					30				
Val	Ile	Pro	Leu	Glu	Asp	Pro	Leu	Gly	Pro	Ala	Val	Ile	Thr	Leu	Leu		
		35					40					45					
Leu	Asp	Glu	Cys	Pro	Leu	Pro	Thr	Lys	Asp	Ala	Leu	Gln	Lys	Leu	Thr		
	50					55					60						
Glu	Ile	Leu	Asn	Leu	Asn	Gly	Glu	Val	Ala	Cys	Gln	Asp	Ser	Ser	His		

```

65              70              75              80
Pro Ala Lys His Arg Asn Thr Ser Ala Val Leu Gly Cys Leu Ala Glu
              85              90              95
Lys Leu Ala Gly Pro Ala Ser Ile Gly Leu Leu Ser Pro Gly Ile Leu
              100             105             110
Glu Tyr Leu Leu Gln Cys Leu Lys Leu Gln Ser His Pro Thr Val Met
              115             120             125
Leu Phe Ala Leu Ile Ala Leu Glu Lys Phe Ala Gln Thr Ser Glu Asn
              130             135             140
Lys Leu Thr Ile Ser Glu Ser Ser Ile Ser Asp Arg Leu Val Thr Leu
145             150             155             160
Glu Ser Trp Ala Asn Asp Pro Asp Tyr Leu Lys Arg Gln Val Gly Phe
              165             170             175
Cys Ala Gln Trp Ser Leu Asp Asn Leu Phe Leu Lys Glu Gly Arg Gln
              180             185             190
Leu Thr Tyr Glu Lys Val Asn Leu Ser Ser Ile Arg Ala Met Leu Asn
              195             200             205
Ser Asn Asp Val Ser Glu Tyr Leu Lys Ile
              210             215

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&lt;210&gt; 6083

&lt;211&gt; 358

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6083

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nnacgcgtga ggggacaggc tgagaaaaaa gaattacgac ataaaataga tgaaatggaa
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300
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358

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&lt;210&gt; 6084

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6084

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Met Glu Glu Lys Glu Gln Glu Leu Gln Ala Lys Ile Glu Ala Leu Gln
1      5      10      15
Ala Asp Asn Asp Phe Thr Asn Glu Arg Leu Thr Ala Leu Gln Glu Lys
20     25     30
Leu Ile Val Glu Gly His Leu Thr Lys Ala Val Glu Glu Thr Lys Leu
35     40     45
Ser Lys Glu Asn Gln Thr Arg Ala Lys Glu Ser Asp Phe Ser Asp Thr
50     55     60
Leu Ser Pro Ser Lys Glu Lys Ser Ser Asp Asp Thr Thr Asp Ala Gln

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65		70		75		80									
Met	Asp	Glu	Gln	Asp	Leu	Asn	Glu	Pro	Leu	Ala	Lys	Val	Ser	Leu	Leu
			85					90						95	
Lys	Asp	Asp	Leu	Gln											
			100												

&lt;210&gt; 6085

&lt;211&gt; 2307

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6085

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120
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cacatagagt cattactaaa tgggggggatt accatcactg tgaacttctg gtataagggg
240
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1260

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 1380  
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 2280  
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 2307

&lt;210&gt; 6086

&lt;211&gt; 84

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6086

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Arg	Gly	Ala	Ser	Leu	Cys	Val	Phe	Val	Cys	Val	Cys	Leu	Cys	Val	Arg
			20					25					30		
Ile	Thr	Leu	Gly	Val	Gln	Ala	Ser	Gly	Cys	Val	Cys	Val	Cys	Ala	Cys
		35				40					45				
Val	Cys	Val	Cys	Val	Ser	Val	Cys	Val	Cys	Val	Cys	Val	His	Thr	Gly
		50				55					60				
Gln	Pro	Pro	Tyr	Leu	Pro	Arg	Phe	Ser	Thr	Ala	Tyr	Leu	Phe	Gln	Trp
65					70					75					80
Asp	Ser	Thr	Val												

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<211> 1506  
<212> DNA  
<213> Homo sapiens

<400> 6087  
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180  
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420  
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540  
cagaaagcct tggtcgaagg atacagagct ggacttgcat gggatttagg agatgtgaa  
600  
gaactgccct ttgatgatga caagtttgat atttacacca ttgcctttgg gatccggaat  
660  
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&lt;211&gt; 4211

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&lt;400&gt; 6089

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&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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&lt;213&gt; Homo sapiens

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<213> Homo sapiens

<400> 6097

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<211> 631

<212> PRT

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<400> 6098

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&lt;210&gt; 6099

&lt;211&gt; 3957

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&lt;213&gt; Homo sapiens

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Cys	Pro	Pro	Gln	Pro	Ser	Pro	Pro	Leu	Gln	Ala	Ala	Cys	Glu	Asn	Gln
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Pro	Ala	Leu	Leu	Thr	His	Gln	Leu	Gln	Arg	Leu	Arg	Ile	Gln	Pro	Ser
			660					665					670		
Ser	Pro	Pro	Pro	Asn	His	Pro	Asn	Asn	His	Leu	Phe	Arg	Gln	Pro	Ser
			675				680					685			
Asn	Ser	Pro	Pro	Pro	Met	Ser	Ser	Ala	Met	Ile	Gln	Pro	His	Gly	Ala
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Ala	Ser	Ser	Ser	Gln	Phe	Gln	Gly	Leu	Pro	Ser	Arg	Ser	Ala	Ile	Phe
705					710					715					720
Gln	Gln	Gln	Pro	Glu	Asn	Cys	Ser	Ser	Pro	Pro	Asn	Val	Ala	Leu	Thr
				725					730					735	
Cys	Leu	Gly	Met	Gln	Gln	Pro	Ala	Gln	Ser	Gln	Gln	Val	Thr	Ile	Gln
			740					745					750		
Val	Gln	Glu	Pro	Val	Asp	Met	Leu	Ser	Asn	Met	Pro	Gly	Thr	Ala	Ala
			755				760					765			
Gly	Ser	Ser	Gly	Arg	Gly	Ile	Ser	Ile	Ser	Pro	Ser	Ala	Gly	Gln	Met
	770					775					780				
Gln	Met	Gln	His	Arg	Thr	Asn	Leu	Met	Ala	Thr	Leu	Ser	Tyr	Gly	His
785					790					795					800
Arg	Pro	Leu	Ser	Lys	Gln	Leu	Ser	Ala	Asp	Ser	Ala	Glu	Ala	His	Ser
				805					810					815	
Leu	Asn	Val	Asn	Arg	Phe	Ser	Pro	Ala	Asn	Tyr	Asp	Gln	Ala	His	Leu
			820					825					830		
His	Pro	His	Leu	Phe	Ser	Asp	Gln	Ser	Arg	Gly	Ser	Pro	Ser	Ser	Tyr
			835				840					845			
Ser	Pro	Ser	Thr	Gly	Val	Gly	Phe	Ser	Pro	Thr	Gln	Ala	Leu	Lys	Val
	850					855					860				
Pro	Pro	Leu	Asp	Gln	Phe	Pro	Thr	Phe	Pro	Pro	Ser	Ala	His	Gln	Gln
865					870					875					880
Pro	Pro	His	Tyr	Thr	Thr	Ser	Ala	Leu	Gln	Gln	Ala	Leu	Leu	Ser	Pro
				885					890					895	
Thr	Pro	Pro	Asp	Tyr	Thr	Arg	His	Gln	Gln	Val	Pro	His	Ile	Leu	Gln

900 905 910  
 Gly Leu Leu Ser Pro Arg His Ser Leu Thr Gly His Ser Asp Ile Arg  
 915 920 925  
 Leu Pro Pro Thr Glu Phe Ala Gln Leu Ile Lys Arg Gln Gln Gln Gln  
 930 935 940  
 Arg Gln Gln Gln Gln Gln Gln Gln Gln Glu Tyr Gln Glu Leu  
 945 950 955 960  
 Phe Arg His Met Asn Gln Gly Asp Ala Gly Ser Leu Ala Pro Ser Leu  
 965 970 975  
 Gly Gly Gln Ser Met Thr Glu Arg Gln Ala Leu Ser Tyr Gln Asn Ala  
 980 985 990  
 Asp Ser Tyr His His Thr Ile Gln Asn Ser Asp Asp Ala Tyr Val Gln  
 995 1000 1005  
 Leu Asp Asn Leu Pro Gly Met Ser Leu Val Ala Gly Lys Ala Leu Ser  
 1010 1015 1020  
 Ser Ala Arg Met Ser Asp Ala Val Leu Ser Gln Ser Ser Leu Met Gly  
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 Ser Gln Gln Phe Gln Asp Gly Glu Asn Glu Glu Cys Gly Ala Ser Leu  
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 Gly Gly His Glu His Pro Asp Leu Ser Asp Gly Ser Gln His Leu Asn  
 1060 1065 1070  
 Ser Ser Cys Tyr Pro Ser Thr Cys Ile Thr Asp Ile Leu Leu Ser Tyr  
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 Lys His Pro Glu Val Ser Phe Ser Met Glu Gln Ala Gly Val  
 1090 1095 1100

&lt;210&gt; 6101

&lt;211&gt; 1447

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6101

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 120  
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 180  
 gtttactaca gggatcccca aatattgtta gttgaatgaa caaacacaca tttcaaggag  
 240  
 ggcactacag tgagtagatg aacagttttc tgataggaga ttgtacaagt aatgttttca  
 300  
 ccagtgtatt ttaggacagc agattcagat taatgcgctg ggactgaatg caaatagtaa  
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 420  
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 480  
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 1320  
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<210> 6102  
 <211> 123  
 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Ile His Leu Gly Pro Arg Gln Ala Val Arg Pro Ser Val Arg Ala Glu  
 50 55 60  
 Ser Arg Arg Val Asp Gly Gly Gly Arg Ser Pro Arg Glu Pro Asp Gly  
 65 70 75 80  
 Arg Gly Arg Ser Arg Gln Ala Arg Phe Ser Pro Tyr Pro Ile Pro Ala  
 85 90 95  
 Val Glu Pro Asp Leu Leu Arg Ser Val Leu Gln Gln Arg Leu Ile Ala  
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<210> 6103  
 <211> 309

<212> DNA

<213> Homo sapiens

<400> 6103

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309

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<210> 6104

<211> 71

<212> PRT

<213> Homo sapiens

<400> 6104

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          20          25          30
Leu Asn Arg Leu Gln Tyr Ala Val Ile Ser Glu Ala Trp Arg Leu Val
          35          40          45
Glu Glu Glu Ile Val Ser Pro Ser Asp Leu Asp Leu Val Met Ser Asp
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Gly Leu Gly Met Arg Tyr Ala
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<210> 6105

<211> 1846

<212> DNA

<213> Homo sapiens

<400> 6105

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120
gggatgaagt ggtgtctccc ctccatctg ctctgcaggg gtccctcagg ctccctatca
180
gccctccag ctgcctcagt tatctctgca ccccatctt cctcctcccg acatcgcaaa
240
cgtcgcagga ctccagcaa gtcggaggca ggggctaggg gtggaggcca gggttccaag
300
gaaaagggcc gagggagttg gggaggccgc caccaccacc accaccact gcctgcagca
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ggcttcaaaa agcaacagcg caagttccag tatgggaatt attgcaaata ctatgggtac
420

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 1800  
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 1846

&lt;210&gt; 6106

&lt;211&gt; 405

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6106

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          20           25           30
Asn Ser Thr Gln Pro Ser Thr Ala Gly Met Lys Trp Cys Leu Pro Phe
          35           40           45
His Leu Leu Cys Arg Gly Pro Ser Gly Ser Leu Ser Ala Pro Pro Ala
          50           55           60
Ala Ser Val Ile Ser Ala Pro Pro Ser Ser Ser Ser Arg His Arg Lys
65           70           75           80
Arg Arg Arg Thr Ser Ser Lys Ser Glu Ala Gly Ala Arg Gly Gly Gly
          85           90           95
Gln Gly Ser Lys Glu Lys Gly Arg Gly Ser Trp Gly Gly Arg His His
          100          105          110
His His His Pro Leu Pro Ala Ala Gly Phe Lys Lys Gln Gln Arg Lys
          115          120          125
Phe Gln Tyr Gly Asn Tyr Cys Lys Tyr Tyr Gly Tyr Arg Asn Pro Ser
          130          135          140
Cys Glu Asp Gly Arg Leu Arg Val Leu Lys Pro Glu Trp Phe Arg Gly
145          150          155          160
Arg Asp Val Leu Asp Leu Gly Cys Asn Val Gly His Leu Thr Leu Ser
          165          170          175
Ile Ala Cys Lys Trp Gly Pro Ser Arg Met Val Gly Leu Asp Ile Asp
          180          185          190
Ser Arg Leu Ile His Ser Ala Arg Gln Asn Ile Arg His Tyr Leu Ser
          195          200          205
Glu Glu Leu Arg Leu Pro Pro Gln Thr Leu Glu Gly Asp Pro Gly Ala
          210          215          220
Glu Gly Glu Glu Gly Thr Thr Thr Val Arg Lys Arg Ser Cys Phe Pro
225          230          235          240
Ala Ser Leu Thr Ala Ser Arg Gly Pro Ile Ala Ala Pro Gln Val Pro
          245          250          255
Leu Asp Gly Ala Asp Thr Ser Val Phe Pro Asn Asn Val Val Phe Val
          260          265          270
Thr Gly Asn Tyr Val Leu Asp Arg Asp Asp Leu Val Glu Ala Gln Thr
          275          280          285
Pro Glu Tyr Asp Val Val Leu Cys Leu Ser Leu Thr Lys Trp Val His
          290          295          300
Leu Asn Trp Gly Asp Glu Gly Leu Lys Arg Met Phe Arg Arg Ile Tyr
305          310          315          320
Arg His Leu Arg Pro Gly Gly Ile Leu Val Leu Glu Pro Gln Pro Trp
          325          330          335
Ser Ser Tyr Gly Lys Arg Lys Thr Leu Thr Glu Thr Ile Tyr Lys Asn
          340          345          350
Tyr Tyr Arg Ile Gln Leu Lys Pro Glu Gln Phe Ser Ser Tyr Leu Thr
          355          360          365
Ser Pro Asp Val Gly Phe Ser Ser Tyr Glu Leu Val Ala Thr Pro His
          370          375          380
Asn Thr Ser Lys Gly Phe Gln Arg Pro Val Tyr Leu Phe His Lys Ala
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Arg Ser Pro Ser His
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<210> 6107  
 <211> 896  
 <212> DNA  
 <213> Homo sapiens

<400> 6107  
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 180  
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 240  
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 300  
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 420  
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 480  
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 660  
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 720  
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 780  
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<210> 6108  
 <211> 124  
 <212> PRT  
 <213> Homo sapiens

<400> 6108  
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 Pro Ala Cys Leu Leu Gly Arg Pro Trp Met Ser Arg Arg Cys Ser Arg  
 35 40 45  
 Leu Gly Ser Thr Pro Pro Pro Ala Pro Ala Ser Pro Val Glu Ser Pro  
 50 55 60  
 Arg Pro Ser Pro Ala Ser Ser Ala Phe Ser Ser Leu Pro Ser Asp Gly  
 65 70 75 80  
 Trp Gly Ser Ser Val Gly Ser Gly Leu Pro Trp Pro Ala Thr Arg Trp

			85					90					95		
Ser	Thr	Cys	Pro	Arg	Trp	Arg	Thr	Asp	Val	Ser	Pro	Ala	Asp	Thr	Ile
			100					105					110		
Ala	Pro	Arg	Ser	Trp	Leu	Leu	Pro	Leu	Ser	Ala	Thr				
			115				120								

&lt;210&gt; 6109

&lt;211&gt; 2087

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6109

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120
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1260

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<210> 6110

<211> 323

<212> PRT

<213> Homo sapiens

<400> 6110

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			20					25					30		
Pro	Gly	Ala	Ala	Ala	Gly	Leu	Thr	Leu	Leu	Cys	Ser	Leu	Val	Pro	Ile
			35				40					45			
Cys	Val	Leu	Arg	Arg	Pro	Gly	Ala	Asn	His	Glu	Gly	Ser	Ala	Ser	Arg
			50			55				60					
Gln	Lys	Ala	Leu	Ser	Leu	Val	Ser	Cys	Phe	Ala	Gly	Gly	Val	Phe	Leu
65					70				75					80	
Ala	Thr	Cys	Leu	Leu	Asp	Leu	Leu	Pro	Asp	Tyr	Leu	Ala	Ala	Ile	Asp
			85					90						95	
Glu	Ala	Leu	Ala	Ala	Leu	His	Val	Thr	Leu	Gln	Phe	Pro	Leu	Gln	Glu
			100					105					110		
Phe	Ile	Leu	Ala	Met	Gly	Phe	Phe	Leu	Val	Leu	Val	Met	Glu	Gln	Ile
			115				120					125			
Thr	Leu	Ala	Tyr	Lys	Glu	Gln	Ser	Gly	Pro	Ser	Pro	Leu	Glu	Glu	Thr
			130			135					140				
Arg	Ala	Leu	Leu	Gly	Thr	Val	Asn	Gly	Gly	Pro	Gln	His	Trp	His	Asp

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Leu	Arg	Ala	Cys	Val	Leu	Val	Phe	Ser	Leu	Ala	Leu	His	Ser	Val	Phe
		180				185							190		
Glu	Gly	Leu	Ala	Val	Gly	Leu	Gln	Arg	Asp	Arg	Ala	Arg	Ala	Met	Glu
		195				200						205			
Leu	Cys	Leu	Ala	Leu	Leu	Leu	His	Lys	Gly	Ile	Leu	Ala	Val	Ser	Leu
	210				215					220					
Ser	Leu	Arg	Leu	Leu	Gln	Ser	His	Leu	Arg	Ala	Gln	Val	Val	Ala	Gly
225				230						235					240
Cys	Gly	Ile	Leu	Phe	Ser	Cys	Met	Thr	Pro	Leu	Gly	Ile	Gly	Leu	Gly
		245				250							255		
Ala	Ala	Leu	Ala	Glu	Ser	Ala	Gly	Pro	Leu	His	Gln	Leu	Ala	Gln	Ser
		260				265						270			
Val	Leu	Glu	Gly	Met	Ala	Ala	Gly	Thr	Phe	Leu	Tyr	Ile	Thr	Phe	Leu
	275				280						285				
Glu	Ile	Leu	Pro	Gln	Glu	Leu	Ala	Ser	Ser	Glu	Gln	Arg	Ile	Leu	Lys
	290			295						300					
Val	Ile	Leu	Leu	Leu	Ala	Gly	Phe	Ala	Leu	Leu	Thr	Gly	Leu	Leu	Phe
305				310					315						320
Ile	Gln	Ile													

&lt;210&gt; 6111

&lt;211&gt; 1706

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6111

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120
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180
tgttttatat cttttatgtc tttattttgt ttgtttttgt ttttgagatg gagtttccct
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300
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420
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720

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 840  
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 1020  
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 1080  
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<210> 6112

<211> 110

<212> PRT

<213> Homo sapiens

<400> 6112

Met	Ser	Leu	Phe	Cys	Phe	Val	Leu	Phe	Leu	Arg	Trp	Ser	Phe	Pro	Leu
1				5					10					15	
Val	Ala	Gln	Ala	Gly	Val	Xaa	Trp	His	Ser	Leu	Gly	Ser	Leu	Gln	Pro
			20					25					30		
Pro	Leu	Pro	Gly	Phe	Lys	Gln	Phe	Ser	Cys	Arg	Ser	Leu	Pro	Ser	Ser
			35				40					45			
Trp	Asp	Tyr	Arg	His	Ala	Pro	Pro	Arg	Gln	Ala	Asn	Phe	Cys	Ile	Phe
	50					55				60					
Ser	Arg	Asp	Gly	Val	Ser	Pro	Cys	Trp	Pro	Gly	Trp	Ser	Gln	Thr	Pro
65					70				75					80	
Asp	Leu	Arg	Arg	Ser	Thr	His	Leu	Ser	Val	Pro	Lys	Cys	Trp	Asp	Tyr
				85				90						95	
Arg	Arg	Glu	Pro	Pro	His	Leu	Ala	Tyr	Glu	Trp	Ser	Phe	Asn		

100

105

110

&lt;210&gt; 6113

&lt;211&gt; 1095

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6113

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ggtgacgcac ttacggcggc cagcgtaagt gcgtgacgct cgtcagtggc ttcagttcac  
120

acgtggcgcc agcggaggca ggttgatgtg tttgtgcttc cttctacagc caatatgaaa  
180

aggcctagta agtggggtcg ggaggcgggc gtggaggggac ccacgtctgg aagttgctgc  
240

agccaccacg acgtcttctt acggctacgg ctttgtctct gctgggtatgg ggggtgggagc  
300

atacgcgtag gccttgcccc tatttctctg tagaaccgag agttggaagt ccctacggcg  
360

atcatgttaa ccgcgcgggc tcattctgcg gaacgaagcc gggcagaggg tggggaagac  
420

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480

tccgtggcca cgtgcagact ggcccagggt agagctgaga atcgctccc agactcagtg  
540

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600

atacgctgtt gtgtatgatc ccattctaatt attgtgaggg taagtgcagg gaattttgac  
660

tccattctgg atctactgaa tttaattctc tgggatttga aagtagcacg tatgtttgca  
720

ttaggcattt cgcattagac ttaacgttag gtttggttagc caataacaca agaaaaggat  
780

ataactccat agtgcgttaa ccagaaacta atcatttggg ttaacagatt tgtgatgtgt  
840

ttctttgtag agttaaagaa agcaagtaaa cgcattgacct gccataagcg gtataaaatc  
900

caaaaaaagg ttcgagaaca tcacgaaaaa ttaagaaagg aggctaaaaa gcgggggtcac  
960

aagaagccta ggaaagaccc aggagttcca aacagtgtc cctttaagga ggctcttctt  
1020

gaggaagctg agctaaggaa acagaggctt gaagaactaa aacagcagca gaaacttgac  
1080

aggcagaagg aacta

1095

&lt;210&gt; 6114

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6114

Met Cys Phe Phe Val Glu Leu Lys Lys Ala Ser Lys Arg Met Thr Cys



1		5		10		15									
His	Lys	Arg	Tyr	Lys	Ile	Gln	Lys	Lys	Val	Arg	Glu	His	His	Arg	Lys
		20					25					30			
Leu	Arg	Lys	Glu	Ala	Lys	Lys	Arg	Gly	His	Lys	Lys	Pro	Arg	Lys	Asp
	35					40					45				
Pro	Gly	Val	Pro	Asn	Ser	Ala	Pro	Phe	Lys	Glu	Ala	Leu	Leu	Glu	Glu
	50				55					60					
Ala	Glu	Leu	Arg	Lys	Gln	Arg	Leu	Glu	Glu	Leu	Lys	Gln	Gln	Gln	Lys
65					70				75						80
Leu	Asp	Arg	Gln	Lys	Glu	Leu									
				85											

&lt;210&gt; 6115

&lt;211&gt; 411

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6115

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120
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180
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240
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300
ggattctgcg catggcgtgt ctccaggctg ctgatgggca agacagatgt gccaggtcca
360
gaatgaactt gagaagagtt tgtagccatt cctgaatcac cttatactag t
411

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&lt;210&gt; 6116

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6116

Met	Ala	Thr	Asn	Ser	Ser	Gln	Val	His	Ser	Gly	Pro	Gly	Thr	Ser	Val
1				5				10					15		
Leu	Pro	Ile	Ser	Ser	Leu	Glu	Thr	Arg	His	Ala	Gln	Asn	Pro	Gly	Gly
			20					25				30			
Gln	Val	Lys	Thr	Pro	Thr	Leu	Gln	Val	Arg	Gly	Ala	Ser	Ala	Leu	Ala
		35					40				45				
Pro	Gln	Phe	Pro	Gln	Arg	Asn	Arg	Leu	Leu	Ala	Ser	Arg	Val	Gly	Tyr
	50				55				60						
Arg	Val	Ser	Val	Leu	His	Gly	Ile	Tyr	Glu	Asp	Val	Pro	Pro	Lys	Leu
65					70				75						80
Leu	Pro	Pro	Pro	Pro	Trp	Asp	Ala	Thr	Val	Arg	Pro	Ala	Asp	Glu	Phe
				85				90					95		
Leu	Pro	Gln	Arg	Pro	Arg	Glu	Gly	Gly	Leu	Arg	Ala	Ala	Ala	Ala	Ala
		100					105					110			
Thr	Gly	Gly	Glu	Ala	Ser	Ala	Gly	Asn	Leu	Gly	Pro	Gly	Gly	Ala	Arg

115                                      120                                      125  
 Arg  
  
 <210> 6117  
 <211> 962  
 <212> DNA  
 <213> Homo sapiens  
  
 <400> 6117  
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 120  
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 180  
 gacgtggagt gcgatacgtg cgccatctgc aggggccagg tgatggatgc ctgtcttaga  
 240  
 tgtcaagctg aaaacaaaca agaggactgt gttgtggtct ggggagaatg taatcattcc  
 300  
 ttccacaact gctgcatgtc cctgtgggtg aaacagaaca atcgctgccc tctctgccag  
 360  
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 420  
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 480  
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 660  
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 720  
 ggcagtggaa gcagtttcag agaacttttt gcatgcttat ggttgatcag ttaaaaaaga  
 780  
 atgttacagt aacaaataaa gtgcagttta aaacccaact cttactctta atttgttcct  
 840  
 aatacgtatt tttggcaggg agagggaacg gtccatgaaa tctttatgtg atataaggat  
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 962  
  
 <210> 6118  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 6118  
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 1                                      5                                      10                                      15  
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<211> 375
<212> DNA
<213> Homo sapiens
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<210> 6120
<211> 118
<212> PRT
<213> Homo sapiens
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5299

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115

105

110

<210> 6121  
<211> 1039  
<212> DNA  
<213> Homo sapiens

<400> 6121  
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120  
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180  
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240  
taattgcaaa ccagggttgt cctcgatcta agctttcaaa aagtacttat gaagaagtta  
300  
aaaccatttt gagtaagaag ataaactgga ttgtgcagta tgcacaaaat aaggatctgg  
360  
attcagattc tgaatgttct aaaaagcccc agcatcatct gtttaatttc aggcataagc  
420  
cagaagaaaa attactccca cagtttgagt cccaagtacc aaaatattct gcaaatgga  
480  
tagatggaag tgcagggtggc atctctaact gtacacaaag aattttggag cagagggaaa  
540  
atacagactt tggactttct atgttacaag attcagggtgc cactttatgt cgtaacagtg  
600  
tattgtggcc tcatagtcac aaccaggcac agaaaaaaga agagacaatc tctagtccag  
660  
aggctaattg ccagaccag catccacatt acagcagaga ggaataagtt tttgaagagt  
720  
taactacca agtgcaagaa aaagattctt tggcctcaca gctccatgtc cgccacgttg  
780  
ccatcgaaca gtttctgaag aactgttcta agttaccatg tctgcaagta gggcgaacag  
840  
gaatgaagtc gcacctacc ataaacaact gacctaaaca gacttacttc gtatgcctg  
900  
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1020  
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1039

<210> 6122  
<211> 221  
<212> PRT  
<213> Homo sapiens

<400> 6122  
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20           25           30
Cys His Ile Cys Phe Glu Leu Asn Ile Glu Gly Val Pro Lys Ser Asp
35           40           45
Leu Leu His Thr Lys Ser Leu Arg Gly His Lys Asp Cys Phe Glu Lys
50           55           60
Tyr His Leu Ile Ala Asn Gln Gly Cys Pro Arg Ser Lys Leu Ser Lys
65           70           75           80
Ser Thr Tyr Glu Glu Val Lys Thr Ile Leu Ser Lys Lys Ile Asn Trp
85           90           95
Ile Val Gln Tyr Ala Gln Asn Lys Asp Leu Asp Ser Asp Ser Glu Cys
100          105          110
Ser Lys Lys Pro Gln His His Leu Phe Asn Phe Arg His Lys Pro Glu
115          120          125
Glu Lys Leu Leu Pro Gln Phe Glu Ser Gln Val Pro Lys Tyr Ser Ala
130          135          140
Lys Trp Ile Asp Gly Ser Ala Gly Gly Ile Ser Asn Cys Thr Gln Arg
145          150          155          160
Ile Leu Glu Gln Arg Glu Asn Thr Asp Phe Gly Leu Ser Met Leu Gln
165          170          175
Asp Ser Gly Ala Thr Leu Cys Arg Asn Ser Val Leu Trp Pro His Ser
180          185          190
His Asn Gln Ala Gln Lys Lys Glu Glu Thr Ile Ser Ser Pro Glu Ala
195          200          205
Asn Val Gln Thr Gln His Pro His Tyr Ser Arg Glu Glu
210          215          220

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&lt;210&gt; 6123

&lt;211&gt; 900

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6123

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120
gcgaaacaac aagagaaaaa aaaggaagct gccctctgcc caaaaccac gtcgaggtcc
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480
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600

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ccgcaccgcc ttctgtctgt cttctcttct tcccagaatg aagacatcac cgagccgcag  
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 720  
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 780  
 agatacggag cctttgggct gcccatcacc gtggcccatg tggatggcca aaccacatg  
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<210> 6124

<211> 300

<212> PRT

<213> Homo sapiens

<400> 6124

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Arg	Leu	Asn	Pro	Gly	Gly	Gly	Gly	Cys	Gly	Glu	Leu	Arg	Ser	His	His
			20					25					30		
Cys	Thr	Pro	Ala	Trp	Ala	Thr	Arg	Ala	Lys	Gln	Gln	Glu	Lys	Lys	Lys
		35					40					45			
Glu	Ala	Ala	Leu	Cys	Pro	Lys	Pro	Thr	Ser	Arg	Ser	Pro	Asn	Leu	Gly
	50					55					60				
Pro	Leu	Gly	Leu	Phe	Ser	Leu	Ser	Val	Pro	Asn	Leu	Leu	Leu	Ala	Gly
65				70						75				80	
Asn	Lys	Pro	Pro	Gly	Leu	Leu	Pro	Arg	Lys	Gly	Leu	Tyr	Met	Ala	Asn
			85						90					95	
Asp	Leu	Lys	Leu	Leu	Arg	His	His	Leu	Gln	Ile	Pro	Ile	His	Phe	Pro
			100					105					110		
Lys	Asp	Phe	Leu	Ser	Val	Met	Leu	Glu	Lys	Gly	Ser	Leu	Ser	Ala	Met
		115					120					125			
Arg	Phe	Leu	Thr	Ala	Val	Asn	Leu	Glu	His	Pro	Glu	Met	Leu	Glu	Lys
			130			135					140				
Ala	Ser	Arg	Glu	Leu	Trp	Met	Arg	Val	Trp	Ser	Arg	Val	Ser	Val	Gly
145					150					155					160
Leu	Trp	Glu	Ser	Ser	Gly	Arg	Thr	Leu	Asp	Asp	Phe	Leu	Thr	Phe	Pro
				165				170						175	
Arg	His	Val	Phe	Arg	Val	Met	Ile	Leu	Pro	Pro	Pro	Gly	Gly	Ser	Thr
			180					185					190		
Val	Leu	Pro	Val	Thr	Pro	Leu	Ser	Pro	His	Arg	Leu	Pro	Ala	Val	Phe
		195					200					205			
Ser	Ser	Ser	Gln	Asn	Glu	Asp	Ile	Thr	Glu	Pro	Gln	Ser	Ile	Leu	Ala
		210				215					220				
Ala	Ala	Glu	Lys	Ala	Gly	Met	Ser	Ala	Glu	Gln	Ala	Gln	Gly	Leu	Leu
225					230					235					240
Glu	Lys	Ile	Ala	Thr	Pro	Lys	Val	Lys	Asn	Gln	Leu	Lys	Glu	Thr	Thr
				245					250					255	
Glu	Ala	Ala	Cys	Arg	Tyr	Gly	Ala	Phe	Gly	Leu	Pro	Ile	Thr	Val	Ala
			260					265					270		
His	Val	Asp	Gly	Gln	Thr	His	Met	Leu	Phe	Gly	Ser	Asp	Arg	Met	Glu
		275					280					285			
Leu	Leu	Ala	His	Leu	Leu	Gly	Glu	Lys	Trp	Met	Gly				

290

295

300

&lt;210&gt; 6125

&lt;211&gt; 468

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6125

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120  
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300  
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360  
aagcagctga cccgtgaggt ggaggagctg aaaagtgaac tgcaggccat tcgagatgag  
420  
aagaatcagc cagacccccg gctgcaagaa cttcaggaag aggccgcc  
468

&lt;210&gt; 6126

&lt;211&gt; 156

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6126

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1				5					10					15	
Asp	Lys	Lys	Lys	Met	Lys	Gln	Asp	Leu	Glu	Asp	Ala	Ser	Asn	Lys	Ala
			20					25					30		
Glu	Glu	Glu	Arg	Ala	Arg	Leu	Glu	Gly	Glu	Leu	Lys	Gly	Leu	Gln	Glu
		35				40						45			
Gln	Ile	Ala	Glu	Thr	Lys	Ala	Arg	Leu	Ile	Thr	Gln	Gln	His	Asp	Arg
	50					55					60				
Ala	Gln	Glu	Gln	Ser	Asp	His	Ala	Leu	Met	Leu	Arg	Glu	Leu	Gln	Lys
65					70					75				80	
Leu	Leu	Gln	Glu	Glu	Arg	Thr	Gln	Arg	Gln	Asp	Leu	Glu	Leu	Arg	Leu
			85					90					95		
Glu	Glu	Thr	Arg	Glu	Ala	Leu	Ala	Gly	Arg	Ala	Tyr	Ala	Ala	Glu	Gln
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&lt;210&gt; 6127

&lt;211&gt; 1900

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6127

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<211> 530

<212> PRT

<213> Homo sapiens

<400> 6128

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&lt;210&gt; 6129

&lt;211&gt; 2012

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6129

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<211> 364

<212> PRT

<213> Homo sapiens

<400> 6130

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Thr Leu Lys Ser Glu Ala Leu Arg Asn Trp Gln Val Tyr Arg Leu Val
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65          70          75          80
Ile Ile Ile Trp Arg Phe Ala Gly Asn Phe Glu Arg Thr Val Gly Thr
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Gly His Met Pro Thr Leu Pro Pro Tyr Gln Pro Ala Ser Gly Leu Cys
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Asn Ser Pro Gly Thr Val Tyr Ser Gly Ala Leu Gly Thr Pro Gly Ala
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355

360

&lt;210&gt; 6131

&lt;211&gt; 3526

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6131

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<211> 167

<212> PRT

<213> Homo sapiens

<400> 6132

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<211> 4156

<212> DNA

<213> Homo sapiens

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<211> 595

<212> PRT

<213> Homo sapiens

<400> 6134

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			20					25					30		
Pro	Asp	Val	Gly	Gly	Gly	Trp	Leu	Glu	Gly	Arg	Asn	Ile	Lys	Gly	Glu
		35					40				45				
Arg	Gly	Leu	Val	Pro	Thr	Asp	Tyr	Val	Glu	Ile	Leu	Pro	Ser	Asp	Gly
	50					55					60				
Lys	Asp	Gln	Phe	Ser	Cys	Gly	Asn	Ser	Val	Ala	Asp	Gln	Ala	Phe	Leu
65					70					75				80	
Asp	Ser	Leu	Ser	Ala	Ser	Thr	Ala	Gln	Ala	Ser	Ser	Ser	Ala	Ala	Ser
			85					90					95		
Asn	Asn	His	Gln	Val	Gly	Ser	Gly	Asn	Asp	Pro	Trp	Ser	Ala	Trp	Ser
		100						105					110		
Ala	Ser	Lys	Ser	Gly	Asn	Trp	Glu	Ser	Ser	Glu	Gly	Trp	Gly	Ala	Gln

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Pro Glu Gly Ala Gly Ala Gln Arg Asn Thr Asn Thr Pro Asn Asn Trp		
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Asp Thr Ala Phe Gly His Pro Gln Ala Tyr Gln Gly Pro Ala Thr Gly		
145	150	155
Asp Asp Asp Asp Trp Asp Glu Asp Trp Asp Gly Pro Lys Ser Ser Ser		
165	170	175
Tyr Phe Lys Asp Ser Glu Ser Ala Asp Ala Gly Gly Ala Gln Arg Gly		
180	185	190
Asn Ser Arg Ala Ser Ser Ser Ser Met Lys Ile Pro Leu Asn Lys Phe		
195	200	205
Pro Gly Phe Ala Lys Pro Gly Thr Glu Gln Tyr Leu Leu Ala Lys Gln		
210	215	220
Leu Ala Lys Pro Lys Glu Lys Ile Pro Ile Ile Val Gly Asp Tyr Gly		
225	230	235
Pro Met Trp Val Tyr Pro Thr Ser Thr Phe Asp Cys Val Val Ala Asp		
245	250	255
Pro Arg Lys Gly Ser Lys Met Tyr Gly Leu Lys Ser Tyr Ile Glu Tyr		
260	265	270
Gln Leu Thr Pro Thr Asn Thr Asn Arg Ser Val Asn His Arg Tyr Lys		
275	280	285
His Phe Asp Trp Leu Tyr Glu Arg Leu Leu Val Lys Phe Gly Ser Ala		
290	295	300
Ile Pro Ile Pro Ser Leu Pro Asp Lys Gln Val Thr Gly Arg Phe Glu		
305	310	315
Glu Glu Phe Ile Lys Met Arg Met Glu Arg Leu Gln Ala Trp Met Thr		
325	330	335
Arg Met Cys Arg His Pro Val Ile Ser Glu Ser Glu Val Phe Gln Gln		
340	345	350
Phe Leu Asn Phe Arg Asp Glu Lys Glu Trp Lys Thr Gly Lys Arg Lys		
355	360	365
Ala Glu Arg Asp Glu Leu Ala Gly Val Met Ile Phe Ser Thr Met Glu		
370	375	380
Pro Glu Ala Pro Asp Leu Asp Leu Val Glu Ile Glu Gln Lys Cys Glu		
385	390	395
Ala Val Gly Lys Phe Thr Lys Ala Met Asp Asp Gly Val Lys Glu Leu		
405	410	415
Leu Thr Val Gly Gln Glu His Trp Lys Arg Cys Thr Gly Pro Leu Pro		
420	425	430
Lys Glu Tyr Gln Lys Ile Gly Lys Ala Leu Gln Ser Leu Ala Thr Val		
435	440	445
Phe Ser Ser Ser Gly Tyr Gln Gly Glu Thr Asp Leu Asn Asp Ala Ile		
450	455	460
Thr Glu Ala Gly Lys Thr Tyr Glu Glu Ile Ala Ser Leu Val Ala Glu		
465	470	475
Gln Pro Lys Lys Asp Leu His Phe Leu Met Glu Cys Asn His Glu Tyr		
485	490	495
Lys Gly Phe Leu Gly Cys Phe Pro Asp Ile Ile Gly Thr His Lys Gly		
500	505	510
Ala Ile Glu Lys Val Lys Glu Ser Asp Lys Leu Val Ala Thr Ser Lys		
515	520	525
Ile Thr Leu Gln Asp Lys Gln Asn Met Val Lys Arg Val Ser Ile Met		
530	535	540
Ser Tyr Ala Leu Gln Ala Glu Met Asn His Phe His Ser Asn Arg Ile		

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Tyr Asp Tyr Asn Ser Val Ile Arg Leu Tyr Leu Glu Gln Gln Val Gln
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Phe Tyr Glu Thr Ile Ala Glu Lys Leu Arg Gln Ala Leu Ser Arg Phe
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Pro Val Met
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<210> 6135
<211> 526
<212> DNA
<213> Homo sapiens

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360
gtttagagca tgtaggaatt ttgcataagg attttgaatc tattttacca accaggaaga
420
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<210> 6136
<211> 105
<212> PRT
<213> Homo sapiens

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                20                25                30
Ser Gln Pro Gln Pro Phe Ala Gly Thr Ala Gly Ser Leu Leu Ser His
                35                40                45
Leu Leu Ser Leu Glu His Val Gly Ile Leu His Lys Asp Phe Glu Ser
50                55                60
Ile Leu Pro Thr Arg Lys Asn His Asn Met Ala Ser Arg Pro Leu Thr
65                70                75                80
Phe Thr Pro Gln Pro Tyr Val Thr Ser Pro Ala Ala Tyr Thr Asp Ala
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Leu Val Lys Pro Ser Ala Ser Gln Tyr
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<210> 6137

<211> 2073

<212> DNA

<213> Homo sapiens

<400> 6137

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<210> 6138

<211> 550

<212> PRT

<213> Homo sapiens

<400> 6138

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			20					25					30		
Arg	Lys	Glu	Ala	Lys	Lys	Gln	Gly	His	Lys	Lys	Pro	Arg	Lys	Asp	Pro
		35				40						45			
Gly	Val	Pro	Asn	Ser	Ala	Pro	Phe	Lys	Glu	Ala	Leu	Leu	Arg	Glu	Ala
	50					55					60				
Glu	Leu	Arg	Lys	Gln	Arg	Leu	Glu	Glu	Leu	Lys	Gln	Gln	Gln	Lys	Leu
65				70					75					80	
Asp	Arg	Gln	Lys	Glu	Leu	Glu	Lys	Lys	Arg	Lys	Leu	Glu	Thr	Asn	Pro
			85						90					95	
Asp	Ile	Lys	Xaa	Ile	Lys	Cys	Gly	Thr	Xaa	Met	Glu	Lys	Glu	Phe	Gly
		100						105					110		
Leu	Cys	Lys	Thr	Glu	Asn	Lys	Ala	Lys	Ser	Gly	Lys	Gln	Asn	Ser	Lys
		115					120					125			
Lys	Leu	Tyr	Cys	Gln	Glu	Leu	Lys	Lys	Val	Ile	Glu	Ala	Ser	Asp	Val
	130					135					140				
Val	Leu	Glu	Val	Leu	Asp	Ala	Arg	Asp	Pro	Leu	Gly	Cys	Arg	Cys	Pro
145				150						155				160	
Gln	Val	Glu	Glu	Ala	Ile	Val	Gln	Ser	Gly	Gln	Lys	Lys	Leu	Val	Leu
			165						170					175	
Ile	Leu	Asn	Lys	Ser	Asp	Leu	Val	Pro	Lys	Glu	Asn	Leu	Glu	Ser	Trp
		180						185					190		
Leu	Asn	Tyr	Leu	Lys	Lys	Glu	Leu	Pro	Thr	Val	Val	Phe	Arg	Ala	Ser

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210	215	220
Lys Asn Ala Ala Pro Phe Arg Ser Glu Val Cys Phe Gly Lys Glu Gly		
225	230	235
Leu Trp Lys Leu Leu Gly Gly Phe Gln Glu Thr Cys Ser Lys Ala Ile		
245	250	255
Arg Val Gly Val Ile Gly Phe Pro Asn Val Gly Lys Ser Ser Ile Ile		
260	265	270
Asn Ser Leu Lys Gln Glu Gln Met Cys Asn Val Gly Val Ser Met Gly		
275	280	285
Leu Thr Arg Ser Met Gln Val Val Pro Leu Asp Lys Gln Ile Thr Ile		
290	295	300
Ile Asp Ser Pro Ser Phe Ile Val Ser Pro Leu Asn Ser Ser Ser Ala		
305	310	315
Leu Ala Leu Arg Ser Pro Ala Ser Ile Glu Val Val Lys Pro Met Glu		
325	330	335
Ala Ala Ser Ala Ile Leu Ser Gln Ala Asp Ala Arg Gln Val Val Leu		
340	345	350
Lys Tyr Thr Val Pro Gly Tyr Arg Asn Ser Leu Glu Phe Phe Thr Val		
355	360	365
Leu Ala Gln Arg Arg Gly Met His Gln Lys Gly Gly Ile Pro Asn Val		
370	375	380
Glu Gly Ala Ala Lys Leu Trp Ser Glu Trp Thr Gly Ala Ser Leu		
385	390	395
Ala Tyr Tyr Cys His Pro Pro Thr Ser Trp Thr Pro Pro Pro Tyr Phe		
405	410	415
Asn Glu Ser Ile Val Val Asp Met Lys Ser Gly Phe Asn Leu Glu Glu		
420	425	430
Leu Glu Lys Asn Asn Ala Gln Ser Ile Arg Ala Ile Lys Gly Pro His		
435	440	445
Leu Ala Asn Ser Ile Leu Phe Gln Ser Ser Gly Leu Thr Asn Gly Ile		
450	455	460
Ile Glu Glu Lys Asp Ile His Glu Glu Leu Pro Lys Arg Lys Glu Arg		
465	470	475
Lys Gln Glu Glu Arg Glu Asp Asp Lys Asp Ser Asp Gln Glu Thr Val		
485	490	495
Asp Glu Glu Val Asp Glu Asn Ser Ser Gly Met Phe Ala Ala Glu Glu		
500	505	510
Thr Gly Glu Ala Leu Ser Glu Glu Thr Thr Ala Gly Glu Gln Ser Thr		
515	520	525
Arg Ser Phe Ile Leu Asp Lys Ile Ile Glu Glu Asp Asp Ala Tyr Asp		
530	535	540
Phe Ser Thr Asp Tyr Val		
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&lt;210&gt; 6139

&lt;211&gt; 2249

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6139

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<210> 6146  
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 <212> PRT  
 <213> Homo sapiens

<400> 6146  
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 Asp Pro Cys Ala Pro Gln Val Lys Lys Gln Cys Pro Pro Lys Asp Thr  
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1852

&lt;210&gt; 6148

&lt;211&gt; 410

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6148

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Gly Trp Ile Lys Lys Gly Thr Asp Val Asp Val Gly Pro Phe Leu Asn
      35           40           45
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      50           55           60
Phe Asn Leu Asp Ile Arg Arg Ala Ile Gln Ile Leu Asn Glu Gly Ala
65           70           75           80
Ser Ser Glu Lys Gly Asp Leu Asn Leu Asn Val Val Ala Met Ala Leu
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      100          105          110
Thr Leu Arg Leu Gln Leu Asn Asn Pro Tyr Leu Cys Val Met Phe Ala
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Phe Leu Thr Ser Glu Thr Gly Ser Tyr Asp Gly Val Leu Tyr Glu Asn
      130          135          140
Lys Val Ala Val Arg Asp Arg Val Ala Phe Ala Cys Lys Phe Leu Ser
145          150          155          160
Asp Thr Gln Leu Asn Arg Tyr Ile Glu Lys Leu Thr Asn Glu Met Lys
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Glu Ala Gly Asn Leu Glu Gly Ile Leu Leu Thr Gly Leu Thr Lys Asp
      180          185          190
Gly Val Asp Leu Met Glu Ser Tyr Val Asp Arg Thr Gly Asp Val Gln
      195          200          205
Thr Ala Ser Tyr Cys Met Leu Gln Gly Ser Pro Leu Asp Val Leu Lys
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225          230          235          240
Ala Trp Arg Phe Trp His Lys Arg Ala Glu Phe Asp Ile His Arg Ser
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Lys Leu Asp Pro Ser Ser Lys Pro Leu Ala Gln Val Phe Val Ser Cys
      260          265          270
Asn Phe Cys Gly Lys Ser Ile Ser Tyr Ser Cys Ser Ala Val Pro His
      275          280          285
Gln Gly Arg Gly Phe Ser Gln Tyr Gly Val Ser Gly Ser Pro Thr Lys
      290          295          300
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305          310          315          320
Ala Leu Cys Leu Ile Asn Met Gly Thr Pro Val Ser Ser Cys Pro Gly
      325          330          335
Gly Thr Lys Ser Asp Glu Lys Val Asp Leu Ser Lys Asp Lys Lys Leu
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 <212> DNA  
 <213> Homo sapiens

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<210> 6150

<211> 508

<212> PRT

<213> Homo sapiens

<400> 6150

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			20					25					30		
Lys	Val	Ser	Leu	Thr	Lys	Thr	Pro	Lys	Leu	Glu	Arg	Gly	Asp	Gly	Gly
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Lys	Glu	Val	Arg	Glu	Arg	Ala	Ser	Lys	Arg	Lys	Leu	Pro	Phe	Thr	Ala
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Gly	Ala	Asn	Gly	Glu	Gln	Lys	Asp	Ser	Asp	Thr	Glu	Lys	Gln	Gly	Pro
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Glu	Arg	Lys	Arg	Ile	Lys	Lys	Glu	Pro	Val	Thr	Arg	Lys	Ala	Gly	Leu
				85				90						95	
Leu	Phe	Gly	Met	Gly	Leu	Ser	Gly	Ile	Arg	Ala	Gly	Tyr	Pro	Leu	Ser
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Glu	Arg	Gln	Gln	Val	Ala	Leu	Leu	Met	Gln	Met	Thr	Ala	Glu	Glu	Ser
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Ala	Asn	Ser	Pro	Val	Asp	Thr	Thr	Pro	Lys	His	Pro	Ser	Gln	Ser	Thr
			130				135					140			
Val	Cys	Gln	Lys	Gly	Thr	Pro	Asn	Ser	Ala	Ser	Lys	Thr	Lys	Asp	Lys
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Ile	Arg	Gly	Asp	Ala	Arg	Arg	Ile	Lys	Glu	Leu	Ile	Ser	Glu	Gly	Ala
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225					230					235					240			
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Ser	Glu	Phe	Glu	Lys	Gly	Leu	Lys	His	Lys	Ala	Lys	Asn	Pro	Glu	Pro			
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Gln	Lys	Ala	Thr	Ala	Pro	Val	Lys	Asp	Glu	Tyr	Glu	Phe	Asp	Glu	Asp			
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Asp	Glu	Gln	Asp	Arg	Val	Pro	Pro	Val	Asp	Asp	Lys	His	Leu	Leu	Lys			
		355					360					365						
Lys	Asp	Tyr	Arg	Lys	Glu	Thr	Lys	Ser	Asn	Ser	Phe	Ile	Ser	Ile	Pro			
	370					375					380							
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				405						410				415				
Ser	Val	Thr	Val	Gly	Thr	Gly	Glu	Lys	Leu	Arg	Leu	Ser	Ala	His	Thr			
			420					425					430					
Ile	Leu	Pro	Gly	Ser	Lys	Thr	Arg	Glu	Pro	Ser	Asn	Ala	Lys	Gln	Gln			
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Lys	Glu	Lys	Asn	Lys	Val	Lys	Lys	Lys	Arg	Lys	Lys	Glu	Thr	Lys	Gly			
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Arg	Arg	Ala	Ser	Pro	Gln	Arg	Val	Gly	Arg	Met	Thr	Gly	Thr	Leu	Trp			
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<211> 648
<212> DNA
<213> Homo sapiens
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240
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<211> 130

<212> PRT

<213> Homo sapiens

<400> 6152

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			20					25					30		
Glu	Arg	Val	Ala	Phe	Ser	Leu	Phe	Thr	His	Thr	Cys	Thr	Gln	Pro	Leu
		35					40					45			
Ala	Gly	Thr	Val	Asp	Thr	His	Leu	Pro	Ser	Leu	Leu	Leu	Pro	Val	Ile
	50					55					60				
Leu	His	Pro	Leu	Gly	Ala	Ala	Ser	Ala	Gly	Arg	Ala	Leu	Glu	Pro	Lys
65					70				75					80	
Ala	Asp	Pro	His	Thr	Cys	Pro	Tyr	Gly	Arg	Lys	Glu	Ser	Arg	Gly	Glu
			85					90						95	
Lys	Val	Arg	Arg	Gly	Arg	Ala	Lys	Ser	Asn	Ser	Gly	Pro	Asn	Val	Pro
			100				105						110		
Gly	Pro	Pro	Ala	Ala	Pro	Gln	Ser	Leu	Lys	Ser	Gly	Ser	Pro	Ser	Thr
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<210> 6153

<211> 1810

<212> DNA

<213> Homo sapiens

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 <211> 388  
 <212> PRT  
 <213> Homo sapiens

<400> 6154

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			20					25					30		
Ser	Arg	Ala	Tyr	Arg	Phe	Thr	Gly	His	Lys	Asp	Ala	Val	Thr	Cys	Val
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Asn	Phe	Ser	Pro	Ser	Gly	His	Leu	Leu	Ala	Ser	Gly	Ser	Arg	Asp	Lys
	50					55					60				
Thr	Val	Arg	Ile	Trp	Val	Pro	Asn	Val	Lys	Gly	Glu	Ser	Thr	Val	Phe
65					70					75					80
Arg	Ala	His	Thr	Ala	Thr	Val	Arg	Ser	Val	His	Phe	Cys	Ser	Asp	Gly
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Trp	Ser	Val	Glu	Ser	Val	Gln	Ser	Gln	Pro	Gln	Glu	Pro	Val	Ser	Val
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<210> 6155  
<211> 995  
<212> DNA  
<213> Homo sapiens

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<210> 6156  
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<212> PRT  
<213> Homo sapiens

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Pro Asn Met Asn Ala Val Ile Ser Leu Gln Lys Ile Ile Glu Ile Gln
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&lt;210&gt; 6157

&lt;211&gt; 2135

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6157

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<211> 455

<212> PRT

<213> Homo sapiens

<400> 6158

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455

&lt;210&gt; 6159

&lt;211&gt; 4310

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6159

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<211> 551

<212> PRT

<213> Homo sapiens

<400> 6160

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				85				90						95		
Gly	Tyr	Leu	Ser	Gln	Gln	Gln	Asn	Met	Met	Gln	Asp	Tyr	Val	Arg	Thr	
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Gly	Thr	Tyr	Gln	Arg	Ala	Ile	Leu	Gln	Asn	His	Thr	Asp	Phe	Lys	Asp	
		115				120				125						
Lys	Ile	Val	Leu	Asp	Val	Gly	Cys	Gly	Ser	Gly	Ile	Leu	Ser	Phe	Phe	
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145					150					155					160	
Met	Ala	Gln	His	Ala	Glu	Val	Leu	Val	Lys	Ser	Asn	Asn	Leu	Thr	Asp	
				165				170						175		
Arg	Ile	Val	Val	Ile	Pro	Gly	Lys	Val	Glu	Glu	Val	Ser	Leu	Pro	Glu	
			180				185						190			
Gln	Val	Asp	Ile	Ile	Ile	Ser	Glu	Pro	Met	Gly	Tyr	Met	Leu	Phe	Asn	
		195				200				205						
Glu	Arg	Met	Leu	Glu	Ser	Tyr	Leu	His	Ala	Lys	Lys	Tyr	Leu	Lys	Pro	
	210					215				220						
Ser	Gly	Asn	Met	Phe	Pro	Thr	Ile	Gly	Asp	Val	His	Leu	Ala	Pro	Phe	
225					230					235					240	
Thr	Asp	Glu	Gln	Leu	Tyr	Met	Glu	Gln	Phe	Thr	Lys	Ala	Asn	Phe	Trp	
				245					250					255		
Tyr	Gln	Pro	Ser	Phe	His	Gly	Val	Asp	Leu	Ser	Ala	Leu	Arg	Gly	Ala	
			260				265						270			
Ala	Val	Asp	Glu	Tyr	Phe	Arg	Gln	Pro	Val	Val	Asp	Thr	Phe	Asp	Ile	
		275					280					285				
Arg	Ile	Leu	Met	Ala	Lys	Ser	Val	Lys	Tyr	Thr	Val	Asn	Phe	Leu	Glu	
	290					295				300						
Ala	Lys	Glu	Gly	Asp	Leu	His	Arg	Ile	Glu	Ile	Pro	Phe	Lys	Phe	His	
305					310					315					320	
Met	Leu	His	Ser	Gly	Leu	Val	His	Gly	Leu	Ala	Phe	Trp	Phe	Asp	Val	
				325				330					335			
Ala	Phe	Ile	Gly	Ser	Ile	Met	Thr	Val	Trp	Leu	Ser	Thr	Ala	Pro	Thr	
			340				345						350			
Glu																

450	455	460
Ser Val Ile Ala Ser Gly Ser Ser Val Gly His Asn Asn Leu Ile Pro		
465	470	475
Leu Ala Asn Thr Gly Ile Val Asn His Thr His Ser Arg Met Gly Ser		480
	485	490
Ile Met Ser Thr Gly Ile Val Gln Gly Ser Ser Gly Ala Gln Gly Ser		495
	500	505
Gly Gly Gly Ser Thr Ser Ala His Tyr Ala Val Asn Ser Gln Phe Thr		510
	515	520
Met Gly Gly Pro Ala Ile Ser Met Ala Ser Pro Met Ser Ile Pro Thr		525
	530	540
Asn Thr Met His Tyr Gly Ser		
545	550	

&lt;210&gt; 6161

&lt;211&gt; 1489

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6161

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180
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240
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1020

```

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 1140  
 ggttttccca gtcattgtaa tgatacaatc agatttgctg tgtcttcaag ttaccatggt  
 1200  
 aaccgtactt ccaccaccca agagtggatt ggagaaggca aaactagggc agagaagcca  
 1260  
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 1320  
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 1380  
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<210> 6162  
 <211> 58  
 <212> PRT  
 <213> Homo sapiens

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 Glu Arg Lys Glu Asp Gly Gly Asn Gly Lys Lys Arg Ser Thr Leu Leu  
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 Arg Lys Gly Thr Glu Pro Gly Val Val Ala His Ala Cys Asn Pro Xaa  
 35 40 45  
 Thr Leu Gly Gly Arg Ser Lys Glu Ile Thr  
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<210> 6163  
 <211> 713  
 <212> DNA  
 <213> Homo sapiens

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 120  
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 180  
 gggcccagcc tctgccagga aaagcaggcc tggctctgct gaaaccccaa tcacgctctg  
 240  
 atggataccg gtacctgggc aaggataccg tggatggact tgattcttct ctctgaaat  
 300  
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 360  
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 420  
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 <212> PRT  
 <213> Homo sapiens

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 Pro Leu Pro Gly Lys Ala Gly Leu Ala Leu Leu Lys Pro Gln Ser Arg  
 35 40 45  
 Ser Asp Gly Tyr Arg Tyr Leu Gly Lys Asp Thr Val Asp Gly Leu Asp  
 50 55 60  
 Ser Ser Leu Leu Lys Cys Thr Arg Arg Cys Met Arg Gly Phe Arg Leu  
 65 70 75 80  
 Pro Glu Lys Gln Pro Ser Lys Thr Arg Val Ser Phe Leu Glu Ser Lys  
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 Arg Lys Glu Gly Ser Gly Trp Leu His Trp Ser Val Thr Arg Ser Gly  
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<210> 6165  
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 <212> DNA  
 <213> Homo sapiens

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 180  
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 ctccaggcac tgaagcgtaa gaagaggtat gagaagcagc tggcgagat cgacggcaca  
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 360  
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 420  
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 600  
 cccgaaacag tccctctacc aaatgttccc tctatagccc taccatcaaa acccgccaag  
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 780  
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<210> 6166

<211> 239

<212> PRT

<213> Homo sapiens

<400> 6166

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			20					25					30		
Gly	Gly	Pro	Thr	Pro	Gln	Glu	Ala	Ile	Gln	Arg	Leu	Arg	Asp	Thr	Glu
			35				40					45			
Glu	Met	Leu	Ser	Lys	Lys	Gln	Glu	Phe	Leu	Glu	Lys	Lys	Ile	Glu	Gln
			50			55					60				
Glu	Leu	Thr	Ala	Ala	Lys	Lys	His	Gly	Thr	Lys	Asn	Lys	Arg	Ala	Ala
65					70				75					80	
Leu	Gln	Ala	Leu	Lys	Arg	Lys	Lys	Arg	Tyr	Glu	Lys	Gln	Leu	Ala	Gln
				85				90					95		
Ile	Asp	Gly	Thr	Leu	Ser	Thr	Ile	Glu	Phe	Gln	Arg	Glu	Ala	Leu	Glu
			100				105					110			
Asn	Ala	Asn	Thr	Asn	Thr	Glu	Val	Leu	Lys	Asn	Met	Gly	Tyr	Ala	Ala
			115			120					125				
Lys	Ala	Met	Lys	Ala	Ala	His	Asp	Asn	Met	Asp	Ile	Asp	Lys	Val	Asp
			130			135				140					
Glu	Leu	Met	Gln	Asp	Ile	Ala	Asp	Gln	Gln	Glu	Leu	Ala	Glu	Glu	Ile
145				150					155					160	
Ser	Thr	Ala	Ile	Ser	Lys	Pro	Val	Gly	Phe	Gly	Glu	Glu	Phe	Asp	Glu
			165				170						175		
Asp	Glu	Leu	Met	Ala	Glu	Leu	Glu	Glu	Leu	Glu	Gln	Glu	Glu	Leu	Asp
			180				185					190			
Lys	Asn	Leu	Leu	Glu	Ile	Ser	Gly	Pro	Glu	Thr	Val	Pro	Leu	Pro	Asn
			195			200						205			
Val	Pro	Ser	Ile	Ala	Leu	Pro	Ser	Lys	Pro	Ala	Lys	Lys	Lys	Glu	Glu
			210			215					220				
Glu	Asp	Asp	Asp	Met	Lys	Glu	Leu	Glu	Asn	Trp	Ala	Gly	Ser	Met	

225

230

235

&lt;210&gt; 6167

&lt;211&gt; 1220

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6167

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720  
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780  
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900  
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960  
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1020  
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1080  
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1220

&lt;210&gt; 6168

&lt;211&gt; 90

&lt;212&gt; PRT

<213> Homo sapiens

<400> 6168

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Pro	Gly	Thr	Gly	Glu	Val	Glu	Asp	Ile	Glu	Gln	Leu	Asn	Gln	Cys	Leu
			20					25					30		
Ile	Gln	His	Phe	His	Leu	Ile	Lys	Thr	Ser	Leu	Ile	Phe	Leu	Cys	Phe
		35					40					45			
Leu	Phe	His	Gly	Ile	His	Glu	Asn	Leu	Leu	Thr	Val	Gly	Val	Ser	Lys
	50					55					60				
Glu	Ala	Tyr	Leu	Met	Thr	Ser	Val	Asn	Gly	Lys	Asn	Lys	Thr	Lys	Met
65					70					75					80
Leu	Tyr	Gly	Gln	Ser	His	Lys	Gly	Lys	Asp						
				85					90						

<210> 6169

<211> 720

<212> DNA

<213> Homo sapiens

<400> 6169

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120
cagtgaacccc aggcttttta tggctgtgaa acacgttaaa atttcagggt aagacgtgac
180
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240
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300
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360
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420
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<210> 6170

<211> 101

<212> PRT

<213> Homo sapiens

<400> 6170

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			20					25					30				
Arg	Glu	Gly	Arg	Ser	Asn	Gly	Glu	Thr	Pro	Ala	Val	Asp	Ile	Gly	Ala		
		35					40					45					
Ala	Asp	Leu	Ala	His	Ala	Gln	Gln	Gln	Gln	Gln	Gln	Trp	His	Leu	Ile		
	50					55				60							
Asn	His	Gln	Pro	Ser	Arg	Ser	Pro	Ser	Ser	Trp	Leu	Lys	Arg	Leu	Ile		
65					70				75					80			
Ser	Ser	Pro	Trp	Glu	Leu	Glu	Val	Leu	Gln	Val	Pro	Cys	Gly	Glu	Gln		
				85				90						95			
Leu	Leu	Arg	Arg	Arg													
				100													

&lt;210&gt; 6171

&lt;211&gt; 1130

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6171

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420
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480
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ctaataacaa aactttctgt gttcttagat tacagaatat cataattgat agaatatggt
1020

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1080

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1130

<210> 6172

<211> 292

<212> PRT

<213> Homo sapiens

<400> 6172

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			20					25					30		
Phe	Gly	Asp	His	Pro	Ile	Pro	Gln	Tyr	Glu	Val	Asn	Pro	Arg	Thr	Thr
		35					40					45			
Glu	Ile	Leu	His	His	Leu	Ser	Glu	Arg	Asn	Arg	Val	Arg	Asp	Arg	Asp
		50				55				60					
Val	Tyr	Leu	Val	Ile	Glu	Asp	Leu	Lys	Gln	Lys	Ala	Ser	Glu	Tyr	Glu
65					70					75				80	
Ser	Glu	Ala	Lys	Tyr	Leu	Gln	Asp	Leu	Leu	Met	Glu	Ser	Val	Asn	Phe
			85						90					95	
Ser	Pro	Ala	Asn	Leu	Ser	Ser	Thr	Gly	Ser	Arg	Tyr	Leu	Asn	Ala	Leu
			100					105					110		
Val	Asp	Ser	Ala	Val	Ala	Leu	Glu	Thr	Lys	Asp	Thr	Ser	Leu	Ala	Ser
		115					120					125			
Phe	Ile	Pro	Ala	Val	Asn	Asp	Leu	Thr	Ser	Asp	Leu	Phe	Arg	Thr	Lys
	130					135					140				
Ser	Lys	Ser	Glu	Glu	Ile	Lys	Ile	Glu	Leu	Glu	Lys	Leu	Glu	Lys	Asn
145					150					155				160	
Leu	Thr	Ala	Thr	Leu	Val	Leu	Glu	Lys	Cys	Leu	Gln	Glu	Asp	Val	Lys
			165						170					175	
Lys	Ala	Glu	Leu	His	Leu	Ser	Thr	Glu	Arg	Ala	Lys	Val	Asp	Asn	Arg
			180					185					190		
Arg	Gln	Asn	Met	Asp	Phe	Leu	Lys	Ala	Lys	Ser	Glu	Glu	Phe	Arg	Phe
	195						200					205			
Gly	Ile	Lys	Ala	Ala	Glu	Glu	Gln	Leu	Ser	Ala	Arg	Gly	Met	Asp	Ala
	210					215					220				
Ser	Leu	Ser	His	Gln	Ser	Leu	Val	Ala	Leu	Ser	Glu	Lys	Leu	Ala	Arg
225					230					235				240	
Leu	Lys	Gln	Gln	Thr	Ile	Pro	Leu	Lys	Lys	Lys	Leu	Glu	Ser	Tyr	Leu
			245						250					255	
Asp	Leu	Met	Pro	Asn	Pro	Ser	Leu	Ala	Gln	Val	Lys	Ile	Glu	Glu	Ala
		260						265					270		
Lys	Arg	Glu	Leu	Asp	Ser	Ile	Glu	Ala	Glu	Leu	Thr	Arg	Arg	Val	Asp
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Met	Met	Glu	Leu												
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<210> 6173

<211> 1483

<212> DNA

<213> Homo sapiens

&lt;400&gt; 6173

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180  
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240  
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1483

&lt;210&gt; 6174

&lt;211&gt; 299

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6174

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Gln Leu Ala Glu Asn Ser Leu Leu Ala Lys Val Phe Ile Thr Lys Gln
      20           25           30
Gly Tyr Ala Leu Leu Val Ser Asp Leu Gln Gln Val Trp His Glu Gln
      35           40           45
Val Asp Thr Ser Val Val Ser Gln Arg Ala Lys Glu Leu Asn Lys Arg
      50           55           60
Leu Thr Ala Pro Pro Ala Ala Phe Leu Cys His Leu Asp Asn Leu Leu
65           70           75           80
Arg Pro Leu Leu Lys Asp Ala Ala His Pro Ser Glu Ala Thr Phe Ser
      85           90           95
Cys Asp Cys Val Ala Asp Ala Leu Ile Leu Arg Val Arg Ser Glu Leu
      100          105          110
Ser Gly Leu Pro Phe Tyr Trp Asn Phe His Cys Met Leu Ala Ser Pro
      115          120          125
Ser Leu Val Ser Gln His Leu Ile Arg Pro Leu Met Gly Met Ser Leu
      130          135          140
Ala Leu Gln Cys Gln Val Arg Glu Leu Ala Thr Leu Leu His Met Lys
145          150          155          160
Asp Leu Glu Ile Gln Asp Tyr Gln Glu Ser Gly Ala Thr Leu Ile Arg
      165          170          175
Asp Arg Leu Lys Thr Glu Pro Phe Glu Glu Asn Ser Phe Leu Glu Gln
      180          185          190
Phe Met Ile Glu Lys Leu Pro Glu Ala Cys Ser Ile Gly Asp Gly Lys
      195          200          205
Pro Phe Val Met Asn Leu Gln Asp Leu Tyr Met Ala Val Thr Thr Gln
      210          215          220
Glu Val Gln Val Gly Gln Lys His Gln Gly Ala Gly Asp Pro His Thr
225          230          235          240
Ser Asn Ser Ala Ser Leu Gln Gly Ile Asp Ser Gln Cys Val Asn Gln
      245          250          255
Pro Glu Gln Leu Val Ser Ser Ala Pro Thr Leu Ser Ala Pro Glu Lys
      260          265          270
Glu Ser Thr Gly Thr Ser Gly Pro Leu Gln Arg Pro Gln Leu Ser Lys
      275          280          285
Val Lys Arg Lys Asn Pro Arg Gly Leu Phe Ser
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&lt;210&gt; 6175

&lt;211&gt; 349

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6175

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120

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<210> 6176

<211> 90

<212> PRT

<213> Homo sapiens

<400> 6176

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			20					25					30		
Gly	Glu	Thr	Asn	Asp	Phe	Glu	Leu	Lys	Asn	Gln	Leu	Leu	Asp	Pro	
			35				40				45				
Asp	Ile	Lys	Arg	Leu	Pro	Trp	Leu	Asn	Arg	Ser	Gln	Thr	Val	Val	Glu
	50					55				60					
Glu	Tyr	Leu	Ala	Phe	Leu	Gly	Asn	Leu	Val	Ser	Ala	Gln	Thr	Val	Phe
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<210> 6177

<211> 1536

<212> DNA

<213> Homo sapiens

<400> 6177

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&lt;210&gt; 6178

&lt;211&gt; 310

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6178

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Ser	Gly	Gly	Phe	Gln	Val	Lys	Leu	Tyr	Asp	Ile	Glu	Gln	Gln	Gln	Ile
			20					25				30			
Arg	Asn	Ala	Leu	Glu	Asn	Ile	Arg	Lys	Glu	Met	Lys	Leu	Leu	Glu	Gln
			35					40				45			
Ala	Gly	Ser	Leu	Lys	Gly	Ser	Leu	Ser	Val	Glu	Glu	Gln	Leu	Ser	Leu
			50				55				60				
Ile	Ser	Gly	Cys	Pro	Asn	Ile	Gln	Glu	Ala	Val	Glu	Gly	Ala	Met	His
65					70				75					80	
Ile	Gln	Glu	Cys	Val	Pro	Glu	Asp	Leu	Glu	Leu	Lys	Lys	Lys	Ile	Phe
			85					90					95		
Ala	Gln	Leu	Asp	Ser	Ile	Ile	Asp	Asp	Arg	Val	Ile	Leu	Ser	Ser	Ser
			100					105				110			
Thr	Ser	Cys	Leu	Met	Pro	Ser	Lys	Leu	Phe	Ala	Gly	Leu	Val	His	Val

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<210> 6180

<211> 751

<212> PRT

<213> Homo sapiens

<400> 6180

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			20					25					30		
Trp	Arg	Xaa	Tyr	Leu	Thr	Asp	Glu	Phe	Ala	Lys	Gly	Arg	Lys	Val	Ala
		35					40					45			
Asp	Leu	Tyr	Glu	Leu	Val	Gln	Tyr	Ala	Gly	Asn	Ile	Ile	Pro	Arg	Leu
	50					55					60				
Tyr	Leu	Leu	Ile	Thr	Val	Gly	Val	Val	Tyr	Val	Lys	Ser	Phe	Pro	Gln
65					70					75				80	
Ser	Arg	Lys	Asp	Ile	Leu	Lys	Asp	Leu	Val	Glu	Met	Cys	Arg	Gly	Val
			85						90					95	
Gln	His	Pro	Leu	Arg	Gly	Leu	Phe	Leu	Arg	Asn	Tyr	Leu	Leu	Gln	Cys
		100						105						110	
Thr	Arg	Asn	Ile	Leu	Pro	Asp	Glu	Gly	Glu	Pro	Thr	Asp	Glu	Glu	Thr
		115					120					125			
Thr	Gly	Asp	Ile	Ser	Asp	Ser	Met	Asp	Phe	Val	Leu	Leu	Asn	Phe	Ala
	130					135					140				
Glu	Met	Asn	Lys	Leu	Trp	Val	Arg	Met	Gln	His	Gln	Gly	His	Ser	Arg
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Asp	Arg	Glu	Lys	Arg	Glu	Arg	Glu	Arg	Gln	Glu	Leu	Arg	Ile	Leu	Val
			165					170					175		
Gly	Thr	Asn	Leu	Val	Arg	Leu	Ser	Xaa	Ser	Trp	Arg	Cys	Lys	Cys	Gly
		180					185					190			
Thr	Leu	Gln	Gln	Ile	Val	Leu	Thr	Gly	Ile	Leu	Glu	Gln	Val	Val	Asn



	195				200				205						
Cys	Arg	Asp	Ala	Leu	Ala	Gln	Glu	Tyr	Leu	Met	Glu	Cys	Ile	Ile	Gln
	210					215					220				
Val	Phe	Pro	Asp	Glu	Phe	His	Leu	Gln	Thr	Leu	Asn	Pro	Phe	Leu	Arg
225					230					235					240
Ala	Cys	Ala	Glu	Leu	His	Gln	Asn	Val	Asn	Val	Lys	Asn	Ile	Ile	Ile
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Ala	Leu	Ile	Asp	Arg	Leu	Ala	Leu	Phe	Ala	His	Arg	Glu	Asp	Gly	Pro
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Gly	Ile	Pro	Ala	Asp	Ile	Lys	Leu	Phe	Asp	Ile	Phe	Ser	Gln	Gln	Val
	275					280						285			
Ala	Thr	Val	Ile	Gln	Ser	Arg	Gln	Asp	Met	Pro	Ser	Glu	Asp	Val	Val
	290					295					300				
Ser	Leu	Gln	Val	Ser	Leu	Ile	Asn	Leu	Ala	Met	Lys	Cys	Tyr	Pro	Asp
305					310					315					320
Arg	Val	Asp	Tyr	Val	Asp	Lys	Val	Leu	Glu	Thr	Thr	Val	Glu	Ile	Phe
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Asn	Lys	Leu	Asn	Leu	Glu	His	Ile	Ala	Thr	Ser	Ser	Ala	Val	Ser	Lys
			340					345					350		
Glu	Leu	Thr	Arg	Leu	Leu	Lys	Ile	Pro	Val	Asp	Thr	Tyr	Asn	Asn	Ile
	355					360						365			
Leu	Thr	Val	Leu	Lys	Leu	Lys	His	Phe	His	Pro	Leu	Phe	Glu	Tyr	Phe
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Asp	Tyr	Glu	Ser	Arg	Lys	Ser	Met	Ser	Cys	Tyr	Val	Leu	Ser	Asn	Val
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Leu	Asp	Tyr	Asn	Thr	Glu	Ile	Val	Ser	Gln	Asp	Gln	Val	Asp	Ser	Ile
			405						410					415	
Met	Asn	Leu	Val	Ser	Thr	Leu	Ile	Gln	Asp	Gln	Pro	Asp	Gln	Pro	Val
			420					425					430		
Glu	Asp	Pro	Asp	Pro	Glu	Asp	Phe	Ala	Asp	Glu	Gln	Ser	Leu	Val	Gly
	435						440					445			
Arg	Phe	Ile	His	Leu	Leu	Arg	Ser	Glu	Asp	Pro	Asp	Gln	Gln	Tyr	Leu
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Ile	Arg	Phe	Thr	Leu	Pro	Pro	Leu	Val	Phe	Ala	Ala	Tyr	Gln	Leu	Ala
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Lys	Ala	Glu	Leu	Ala	Glu	Leu	Pro	Leu	Arg	Leu	Phe	Leu	Gln	Gly	Ala
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Leu	Ala	Ala	Gly	Glu	Ile	Gly	Phe	Glu	Asn	His	Glu	Thr	Val	Ala	Tyr
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Glu	Phe	Met	Ser	Gln	Ala	Phe	Ser	Leu	Tyr	Glu	Asp	Glu	Ile	Ser	Asp
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Ser	Lys	Ala	Gln	Leu	Ala	Ala	Ile	Thr	Leu	Ile	Ile	Gly	Thr	Phe	Glu
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Arg	Met	Lys	Cys	Phe	Ser	Glu	Glu	Asn	His	Glu	Pro	Leu	Arg	Thr	Gln
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Cys	Ala	Leu	Ala	Ala	Ser	Lys	Leu	Leu	Lys	Lys	Pro	Asp	Gln	Gly	Arg
	610					615					620				
Ala	Glu	His	Leu	Cys	Thr	Ser	Leu	Trp	Ser	Gly	Arg	Asn	Thr	Asp	Lys

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Gln Leu Phe Ile Glu Ile Leu Asn Arg Tyr Ile Tyr Phe Tyr Glu Lys						
	675		680		685	
Glu Asn Asp Ala Val Thr Ile Gln Val Leu Asn Gln Leu Ile Gln Lys						
	690		695		700	
Ile Arg Glu Asp Leu Pro Asn Leu Glu Ser Ser Glu Glu Thr Glu Gln						
705		710		715		720
Ile Asn Lys His Phe His Asn Thr Leu Glu His Leu Arg Leu Arg Arg						
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&lt;210&gt; 6181

&lt;211&gt; 1135

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6181

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<210> 6182

<211> 236

<212> PRT

<213> Homo sapiens

<400> 6182

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Glu	Val	Phe	Phe	Leu	Pro	Asp	Leu	Pro	Thr	Thr	Pro	Tyr	Phe	Ser	Arg
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Asp	Ala	Gln	Lys	His	Asp	Val	Glu	Val	Leu	Glu	Arg	Asn	Phe	Gln	Thr
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Ile	Leu	Cys	Glu	Phe	Glu	Thr	Leu	Tyr	Lys	Ala	Phe	Ser	Asn	Cys	Ser
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Leu	Pro	Gln	Gly	Trp	Lys	Met	Asn	Ser	Thr	Pro	Ser	Gly	Glu	Trp	Phe
				85					90					95	
Thr	Phe	Tyr	Leu	Val	Asn	Gln	Gly	Val	Cys	Val	Pro	Arg	Asn	Cys	Arg
			100					105					110		
Lys	Cys	Pro	Arg	Thr	Tyr	Arg	Leu	Leu	Gly	Ser	Leu	Arg	Thr	Cys	Ile
		115					120					125			
Gly	Asn	Asn	Val	Phe	Gly	Asn	Ala	Cys	Ile	Ser	Val	Leu	Ser	Pro	Gly
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Thr	Val	Ile	Thr	Glu	His	Tyr	Gly	Pro	Thr	Asn	Ile	Arg	Ile	Arg	Cys
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His	Leu	Gly	Leu	Lys	Thr	Pro	Asn	Gly	Cys	Glu	Leu	Val	Val	Gly	Gly
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Glu	Pro	Gln	Cys	Trp	Ala	Glu	Gly	Arg	Cys	Leu	Leu	Phe	Asp	Asp	Ser
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Phe	Leu	His	Ala	Ala	Phe	His	Glu	Gly	Ser	Ala	Glu	Asp	Gly	Pro	Arg
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<210> 6183

<211> 2530

<212> DNA

<213> Homo sapiens

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<211> 308

<212> PRT

<213> Homo sapiens

<400> 6184

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			20					25				30			
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	50					55					60				
Ala	Arg	Gly	Gly	Lys	Ala	Glu	Asp	Lys	Glu	Trp	Met	Pro	Val	Thr	Lys
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Leu	Gly	Arg	Leu	Val	Lys	Asp	Met	Lys	Ile	Lys	Ser	Leu	Glu	Glu	Ile
			85					90					95		
Tyr	Leu	Phe	Ser	Leu	Pro	Ile	Lys	Glu	Ser	Glu	Ile	Ile	Asp	Phe	Phe
			100					105					110		
Leu	Gly	Ala	Ser	Leu	Lys	Asp	Glu	Val	Leu	Lys	Ile	Met	Pro	Val	Gln
	115					120					125				
Lys	Gln	Thr	Arg	Ala	Gly	Gln	Arg	Thr	Arg	Phe	Lys	Ala	Phe	Val	Ala
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Ile	Gly	Asp	Tyr	Asn	Gly	His	Val	Gly	Leu	Gly	Val	Lys	Cys	Ser	Lys

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    165                                      170                                      175  
 Ile Val Pro Val Arg Arg Gly Tyr Trp Gly Asn Lys Ile Gly Lys Pro  
    180                                      185                                      190  
 His Thr Val Pro Cys Lys Val Thr Gly Arg Cys Gly Ser Val Leu Val  
    195                                      200                                      205  
 Arg Leu Ile Pro Ala Pro Arg Gly Thr Gly Ile Val Ser Ala Pro Val  
    210                                      215                                      220  
 Pro Lys Lys Leu Leu Met Met Ala Gly Ile Asp Asp Cys Tyr Thr Ser  
 225                                      230                                      235                                      240  
 Ala Arg Gly Cys Thr Ala Thr Leu Gly Asn Phe Ala Lys Ala Thr Phe  
    245                                      250                                      255  
 Asp Ala Ile Ser Lys Thr Tyr Ser Tyr Leu Thr Pro Asp Leu Trp Lys  
    260                                      265                                      270  
 Glu Thr Val Phe Thr Lys Ser Pro Tyr Gln Glu Phe Thr Asp His Leu  
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&lt;210&gt; 6185

&lt;211&gt; 1231

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6185

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<210> 6186

<211> 133

<212> PRT

<213> Homo sapiens

<400> 6186

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Tyr	Ser	Pro	Asn	Thr	Ala	Tyr	Gly	Val	Asp	Phe	Leu	Val	Pro	Val	Met
			20					25					30		
Gly	Tyr	Ile	Cys	Arg	Ile	Cys	His	Lys	Phe	Tyr	His	Ser	Asn	Ser	Gly
		35					40					45			
Ala	Gln	Leu	Ser	His	Cys	Lys	Ser	Leu	Gly	His	Phe	Glu	Asn	Leu	Gln
	50					55					60				
Lys	Tyr	Lys	Ala	Ala	Lys	Asn	Pro	Ser	Pro	Thr	Thr	Arg	Pro	Val	Ser
65					70					75				80	
Arg	Arg	Cys	Ala	Ile	Asn	Ala	Arg	Asn	Ala	Leu	Thr	Ala	Leu	Phe	Thr
				85					90					95	
Ser	Ser	Gly	Arg	Pro	Pro	Ser	Gln	Pro	Asn	Thr	Gln	Asp	Lys	Thr	Pro
			100					105					110		
Ser	Lys	Val	Thr	Ala	Arg	Pro	Ser	Gln	Pro	Pro	Leu	Pro	Arg	Arg	Ser
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Thr	Arg	Leu	Lys	Thr											
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<210> 6187

<211> 909

<212> DNA

<213> Homo sapiens

<400> 6187

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<211> 227

<212> PRT

<213> Homo sapiens

<400> 6188

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			20					25					30		
Glu	Ala	Leu	Leu	Asp	Glu	Asp	Thr	Leu	Phe	Cys	Gln	Gly	Leu	Glu	Val
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Phe	Tyr	Pro	Glu	Leu	Gly	Asn	Ile	Gly	Cys	Lys	Val	Val	Pro	Asp	Cys
	50					55				60					
Asn	Asn	Tyr	Arg	Gln	Lys	Ile	Thr	Ser	Trp	Met	Glu	Pro	Ile	Val	Lys
65					70				75					80	
Phe	Pro	Gly	Ala	Val	Tyr	Gly	Ala	Thr	Tyr	Ile	Leu	Val	Met	Val	Asp
			85					90					95		
Pro	Asp	Ala	Pro	Ser	Arg	Ala	Glu	Pro	Arg	Gln	Arg	Phe	Trp	Arg	His
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Trp	Leu	Val	Thr	Asp	Ile	Lys	Gly	Ala	Asp	Leu	Lys	Lys	Gly	Lys	Ile
		115					120					125			
Gln	Gly	Gln	Glu	Leu	Ser	Ala	Tyr	Gln	Ala	Pro	Ser	Pro	Pro	Ala	His
		130				135					140				
Ser	Gly	Phe	His	Arg	Tyr	Gln	Phe	Phe	Val	Tyr	Leu	Gln	Glu	Gly	Lys
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&lt;211&gt; 576

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Lys Phe Gly Ile Gln Leu Lys Glu Ile Asp Lys Glu Glu His Leu Tyr
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Gln	Asp	Ala	His	Gly	Gln	Pro	Asp	Val	Ser	Ala	Phe	Asp	Phe	Thr	Ser
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Glu	Asn	Glu	Leu	Gly	Ile	Thr	Pro	Val	Val	Ser	Ala	Gln	Ala	Val
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<212> PRT

<213> Homo sapiens

<400> 6194

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			20				25					30			
Asn	Thr	His	Arg	Ala	Ile	Glu	Ser	Asn	Ser	Gln	Thr	Ser	Pro	Leu	Asn
		35					40					45			
Ala	Glu	Val	Val	Gln	Tyr	Ala	Lys	Glu	Val	Val	Asp	Phe	Ser	Ser	His
	50					55					60				
Tyr	Gly	Ser	Glu	Asn	Ser	Met	Ser	Tyr	Thr	Met	Trp	Asn	Leu	Ala	Gly
65				70					75					80	
Val	Pro	Asn	Val	Phe	Pro	Ser	Ser	Gly	Asp	Phe	Thr	Gln	Thr	Ala	Val
			85						90					95	
Phe	Arg	Thr	Tyr	Gly	Thr	Trp	Trp	Asp	Gln	Cys	Pro	Ser	Ala	Ser	Leu
			100					105					110		
Pro	Phe	Lys	Arg	Thr	Pro	Pro	Asn	Phe	Gln	Ser	Gln	Asp	Tyr	Val	Glu
		115					120					125			
Leu	Thr	Phe	Glu	Gln	Gln	Val	Tyr	Pro	Thr	Ala	Val	His	Val	Leu	Glu
	130					135					140				
Thr	Tyr	His	Pro	Gly	Ala	Val	Ile	Arg	Ile	Leu	Ala	Cys	Ser	Ala	Asn
145				150						155					160
Pro	Tyr	Ser	Pro	Asn	Pro	Pro	Ala	Glu	Val	Arg	Trp	Glu	Ile	Leu	Trp

				165				170					175				
Ser	Glu	Arg	Pro	Thr	Lys	Val	Asn	Ala	Ser	Gln	Ala	Arg	Gln	Phe	Lys		
			180					185					190				
Pro	Cys	Ile	Lys	Gln	Ile	Asn	Phe	Pro	Thr	Asn	Leu	Ile	Arg	Leu	Glu		
		195					200					205					
Val	Asn	Ser	Ser	Leu	Leu	Glu	Tyr	Tyr	Thr	Glu	Leu	Asp	Ala	Val	Val		
	210					215					220						
Leu	His	Gly	Val	Lys	Asp	Lys	Pro	Val	Leu	Ser	Leu	Lys	Thr	Ser	Leu		
225					230					235					240		
Ile	Asp	Met	Asn	Asp	Ile	Glu	Asp	Asp	Ala	Tyr	Ala	Glu	Lys	Asp	Gly		
				245					250					255			
Cys	Gly	Met	Asp	Ser	Leu	Asn	Lys	Lys	Phe	Ser	Ser	Ala	Val	Leu	Gly		
			260					265					270				
Glu	Gly	Pro	Asn	Asn	Gly	Tyr	Phe	Asp	Lys	Leu	Pro	Tyr	Glu	Leu	Ile		
		275					280					285					
Gln	Leu	Ile	Leu	Asn	His	Leu	Thr	Leu	Pro	Asp	Leu	Cys	Arg	Leu	Ala		
	290					295					300						
Gln	Thr	Cys	Lys	Leu	Leu	Ser	Gln	His	Cys	Cys	Asp	Pro	Leu	Gln	Tyr		
305					310					315					320		
Ile	His	Leu	Asn	Leu	Gln	Pro	Tyr	Trp	Ala	Lys	Leu	Asp	Asp	Thr	Ser		
				325					330					335			
Leu	Glu	Phe	Leu	Gln	Ser	Arg	Cys	Thr	Leu	Val	Gln	Trp	Leu	Asn	Leu		
			340					345					350				
Ser	Trp	Thr	Gly	Asn	Arg	Gly	Phe	Ile	Ser	Val	Ala	Gly	Phe	Ser	Arg		
	355						360					365					
Phe	Leu	Lys	Val	Cys	Gly	Ser	Glu	Leu	Val	Arg	Leu	Glu	Leu	Ser	Cys		
	370				375					380							
Ser	His	Phe	Leu	Asn	Glu	Thr	Cys	Leu	Glu	Val	Ile	Ser	Glu	Met	Cys		
385					390					395					400		
Pro	Asn	Leu	Gln	Ala	Leu	Asn	Leu	Ser	Ser	Cys	Asp	Lys	Leu	Pro	Pro		
				405					410					415			
Gln	Ala	Phe	Asn	His	Ile	Ala	Lys	Leu	Cys	Ser	Leu	Lys	Arg	Leu	Val		
			420					425					430				
Leu	Tyr	Arg	Thr	Lys	Val	Glu	Gln	Thr	Ala	Leu	Leu	Ser	Ile	Leu	Asn		
	435						440					445					
Phe	Cys	Ser	Glu	Leu	Gln	His	Leu	Ser	Leu	Gly	Ser	Cys	Val	Met	Ile		
	450					455					460						
Glu	Asp	Tyr	Asp	Val	Ile	Ala	Ser	Met	Ile	Gly	Ala	Lys	Cys	Lys	Lys		
465					470					475					480		
Leu	Arg	Thr	Leu	Asp	Leu	Trp	Arg	Cys	Lys	Asn	Ile	Thr	Glu	Asn	Gly		
				485					490					495			
Ile	Ala	Glu	Leu	Ala	Ser	Gly	Cys	Pro	Leu	Leu	Glu	Glu	Leu	Asp	Leu		
			500					505					510				
Gly	Trp	Cys	Pro	Thr	Leu	Gln	Ser	Ser	Thr	Gly	Cys	Phe	Thr	Arg	Leu		
	515						520					525					
Ala	His	Gln	Leu	Pro	Asn	Leu	Gln	Lys	Leu	Phe	Leu	Thr	Ala	Asn	Arg		
	530					535					540						
Ser	Val	Cys	Asp	Thr	Asp	Ile	Asp	Glu	Leu	Ala	Cys	Asn	Cys	Thr	Arg		
545					550					555					560		
Leu	Gln	Gln	Leu	Asp	Ile	Leu	Gly	Thr	Arg	Met	Val	Ser	Pro	Ala	Ser		
				565				570						575			
Leu	Arg	Lys	Leu	Glu	Ser	Cys	Lys	Asp	Leu	Ser	Leu	Leu	Asp	Val			
			580				585					590					
Ser	Phe	Cys	Ser	Gln	Ile	Asp	Asn	Arg	Ala	Val	Leu	Glu	Leu	Asn	Ala		

5380

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6197

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120  
aataccaggt acagcctttc cccgctcatc cagagcagga caaacaggcc aggtgggtatc  
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300  
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360  
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420  
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<210> 6198

<211> 124

<212> PRT

<213> Homo sapiens

<400> 6198

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		20		25		30
Ser	Ser	Gln	His	His	Gly	Leu
		35		40		45
Pro	Gly	Trp	Gly	Met	Trp	Gly
		50		55		60
Arg	Glu	Lys	Cys	Val	Gln	Arg
65				70		75
Leu	Arg	Leu	Trp	Leu	Gly	Ser
		85		90		95
Ser	Tyr	Phe	Leu	Ser	Pro	Thr
		100		105		110
Val	Ala	Thr	Ile	Leu	Glu	Leu
		115		120		

&lt;210&gt; 6199

&lt;211&gt; 1777

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6199

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 1560  
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 1680  
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<210> 6200

<211> 164

<212> PRT

<213> Homo sapiens

<400> 6200

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Phe	Trp	Glu	Glu	Gly	Ser	Ala	Pro	Arg	Pro	Gln	Glu	Ser	Arg	Gln	Arg
			20					25					30		
Pro	Pro	Lys	Pro	Asp	Cys	Gln	Gln	Lys	Pro	Ser	Pro	Ser	Glu	Gly	Gln
			35				40					45			
Val	Gly	Val	Pro	Xaa	Arg	Ser	Pro	His	Pro	Gln	Gly	Gly	Phe	Thr	His
			50			55					60				
Cys	Pro	Val	Pro	Gly	Met	Pro	Gly	Gly	Arg	Pro	Leu	Cys	Cys	Cys	His
65					70				75					80	
Cys	Cys	Gln	His	Cys	Pro	Ala	Cys	Glu	Ala	Arg	Arg	Ser	Pro	Cys	Pro
			85					90					95		
Thr	Arg	Cys	Cys	Cys	Ser	Ser	Asp	Pro	Cys	Cys	Glu	Glu	Trp	Asp	Ser
			100					105					110		
Trp	Ser	Lys	Lys	Leu	Val	Phe	Leu	Phe	Cys	Ile	Asn	Glu	Lys	Asn	Pro
			115				120					125			
Gly	Glu	Ala	Ala	Thr	Leu	Pro	Ser	Gln	Arg	Asp	Ala	Leu	Pro	Cys	Phe
			130			135					140				
Gly	Val	Leu	Ser	Pro	Phe	Pro	Pro	Leu	Val	Gln	Gly	Gln	Pro	Ser	Arg



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<210> 6201
<211> 604
<212> DNA
<213> Homo sapiens
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180
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480
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600
gccg
604
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<210> 6202
<211> 124
<212> PRT
<213> Homo sapiens
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<400> 6202
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Pro Ser Asp Arg Met Arg Asp Arg Asn Ala Gln Gln Arg Ala Ile Gln
                20                      25              30
Gly Gln Trp Thr Leu Gly Arg Gly Ala Glu Trp Ala Ala Leu Arg Arg
                35                      40              45
Ala Gly Leu Arg Gly Cys Arg Glu Glu Phe Gly Gly Lys Gly Gln Pro
 50                    55                      60
Gln Ser Leu Ser Cys Ala Ser Trp Glu Arg Gly Met Thr Gly Arg His
65                    70                      75              80
Thr Asn Val Ser Gln Gly Arg Trp Ala Trp Gly His Arg Ala Pro Arg
                85                      90              95
Gly Gly Ser Gly Glu Gly Glu Pro Ala Glu Glu Arg Pro Gly Arg Ala
                100                      105              110
Gly Asp His Ala Gly Ala Gln Gly Glu Arg Gln Asp

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115 120

<210> 6203  
<211> 3462  
<212> DNA  
<213> Homo sapiens

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120  
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240  
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2160  
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<210> 6204

<211> 486

<212> PRT

<213> Homo sapiens

<400> 6204

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Asp	Gly	His	Arg	Leu	Cys	Ser	Asp	Leu	Met	Asn	Cys	Leu	His	Glu	Arg
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Arg	Trp	Arg	Gln	Leu	Val	Glu	Lys	Gly	Pro	Gln	Tyr	Gly	Thr	Val	Glu
65				70					75					80	
Lys	Ala	Trp	Met	Ala	Phe	Met	Ser	Glu	Ala	Glu	Arg	Val	Ser	Glu	Leu
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	275		280		285
Asn His Gly Pro Gly Met Ala Met Asn Trp Pro Gln Phe Glu Glu Trp					
	290		295		300
Ser Ala Asp Leu Asn Arg Thr Leu Ser Arg Arg Glu Lys Lys Lys Ala					
305		310		315	320
Thr Asp Gly Val Thr Leu Thr Gly Ile Asn Gln Thr Gly Asp Gln Ser					
	325		330		335
Leu Pro Ser Lys Pro Ser Ser Thr Leu Asn Val Pro Ser Asn Pro Ala					
	340		345		350
Gln Ser Ala Gln Ser Gln Ser Ser Tyr Asn Pro Phe Glu Asp Glu Asp					
	355		360		365
Asp Thr Gly Ser Thr Val Ser Glu Lys Asp Asp Thr Lys Ala Lys Asn					
	370		375		380
Val Ser Ser Tyr Glu Lys Thr Gln Ser Tyr Pro Thr Asp Trp Ser Asp					
385		390		395	400
Asp Glu Ser Asn Asn Pro Phe Ser Ser Thr Asp Ala Asn Gly Asp Ser					
	405		410		415
Asn Pro Phe Asp Asp Asp Ala Thr Ser Gly Thr Glu Val Arg Val Arg					
	420		425		430
Ala Leu Tyr Asp Tyr Glu Gly Gln Glu His Asp Glu Leu Ser Phe Lys					
	435		440		445
Ala Gly Asp Glu Leu Thr Lys Met Glu Asp Glu Asp Glu Gln Gly Trp					
	450		455		460
Cys Lys Gly Arg Leu Asp Asn Gly Gln Val Gly Leu Tyr Pro Ala Asn					
465		470		475	480
Tyr Val Glu Ala Ile Gln					
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&lt;210&gt; 6205

&lt;211&gt; 926

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6205

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300

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360

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420

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480

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<210> 6206

<211> 92

<212> PRT

<213> Homo sapiens

<400> 6206

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			20					25					30		
Arg	Glu	Gly	Lys	Glu	Phe	Ala	Asp	Ser	Gln	Lys	Leu	Leu	Phe	Met	Glu
		35					40					45			
Thr	Ser	Ala	Lys	Leu	Asn	His	Gln	Val	Ser	Glu	Val	Phe	Asn	Thr	Val
	50					55					60				
Ala	Gln	Glu	Leu	Leu	Gln	Arg	Ser	Asp	Glu	Glu	Gly	Gln	Ala	Leu	Xaa
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<210> 6207

<211> 1384

<212> DNA

<213> Homo sapiens

<400> 6207

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&lt;210&gt; 6208

&lt;211&gt; 290

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6208

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		20						25					30		
Ser	Ala	Gly	Leu	Ser	Leu	Val	Gly	Leu	Leu	Thr	Leu	Gly	Ala	Val	Leu
		35					40					45			
Ser	Ala	Ala	Ala	Thr	Val	Arg	Glu	Ala	Gln	Gly	Leu	Met	Ala	Gly	Gly
		50				55				60					
Phe	Leu	Cys	Phe	Ser	Leu	Ala	Phe	Xaa	Ala	Gln	Val	Gln	Val	Val	Phe
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<211> 165

<212> PRT

<213> Homo sapiens

<400> 6210

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			20					25					30		
Ser	Pro	Ser	Leu	Arg	Gly	Thr	His	Leu	Leu	Phe	Leu	Pro	Gln	Ala	Asp
		35					40					45			
Val	Val	Asp	Glu	Ala	Ile	Asp	Ser	Leu	Ala	Arg	Thr	Lys	Gly	Val	Met
	50					55					60				
Lys	Pro	Pro	Cys	Ser	Glu	Gly	Ser	Pro	Trp	Arg	Cys	Pro	His	Phe	Thr
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Cys	Trp	Val	Leu	Gln	Ala	Arg	Lys	Pro	Gly	Ser	Gly	Gly	Thr	Arg	Glu
				85					90					95	
Arg	Gln	Ala	Cys	Val	Trp	Thr	Ser	Ala	Gly	Ala	Ala	Ala	Leu	Arg	Leu
			100					105					110		
Ala	Arg	Glu	Arg	Gln	Arg	Trp	Val	Phe	Arg	Phe	His	Ala	Tyr	Val	Trp
		115					120					125			
Ala	His	Ser	Gln	His	Gly	Arg	Val	Ser	Ala	Val	Leu	Val	Leu	Thr	Leu
	130					135					140				
Pro	Glu	Gln	Gln	Trp	Thr	Asp	Glu	Ile	Arg	Leu	Phe	Gln	Lys	Gln	Arg
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<210> 6211

<211> 2163

<212> DNA

<213> Homo sapiens

<400> 6211

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 Lys Gln Glu Leu Ala Glu Thr Leu Ala Asn Leu Glu Arg Gln Ile Tyr  
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 Glu Ser Asp Thr Ser Pro Asp Phe His Asn Gln Glu Asn Glu Pro Ser  
 130 135 140  
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 145 150 155 160  
 Gln Lys Ala Ala Ser Thr Ser Ser Gly Ser His His Ser Ser His  
 165 170 175  
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 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 6214

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6214

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 35 40 45  
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<210> 6216  
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 <212> PRT  
 <213> Homo sapiens

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 Glu Ala Val Ala Ile Gly Pro Arg Gly Cys Ser Gly Ser Leu Arg Trp  
 35 40 45  
 Leu Gln Glu Ser Asp Ala Ala Pro Leu Pro Leu Ser Cys His Leu Ala  
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<210> 6217  
 <211> 2955  
 <212> DNA  
 <213> Homo sapiens

<400> 6217

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240  
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&lt;210&gt; 6218

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6218

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Gly Tyr Ile Cys Arg Ile Cys His Lys Phe Tyr His Ser Asn Ser Gly
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Ala Gln Leu Ser His Cys Lys Ser Leu Gly His Phe Glu Asn Leu Gln
      50           55           60
Lys Tyr Lys Ala Ala Lys Asn Pro Ser Pro Thr Thr Arg Pro Val Ser
      65           70           75           80
Arg Arg Cys Ala Ile Asn Ala Arg Asn Ala Leu Thr Ala Leu Phe Thr
      85           90           95
Ser Ser Gly Arg Pro Pro Ser Gln Pro Asn Thr Gln Asp Lys Thr Pro
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Thr Arg Leu Lys Thr
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&lt;210&gt; 6219

&lt;211&gt; 2495

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6219

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<210> 6220  
 <211> 179  
 <212> PRT  
 <213> Homo sapiens

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 Pro Tyr Ser Pro Pro Ala Ala Arg Pro Gly Pro Gly Xaa Pro Leu Trp  
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 Leu Pro Ser Pro Arg Pro Val Cys Trp Asp Gly Ala Ser Thr Leu Arg  
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<210> 6221  
 <211> 1487  
 <212> DNA  
 <213> Homo sapiens

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<210> 6222

<211> 330

<212> PRT

<213> Homo sapiens

<400> 6222

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Pro Tyr Arg Cys His Asp Cys Gly Lys Cys Phe Arg Gln Leu Ala Tyr					
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	260		265		270
Phe Phe Gln Cys Gly Glu Cys Gly Lys Thr Phe Ser Phe Lys Arg Asn					
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	290		295		300
Val Ile Cys Gly Lys Ser Phe Lys Trp His Thr Ser Phe Ile Lys His					
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&lt;210&gt; 6223

&lt;211&gt; 944

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6223

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<210> 6224

<211> 156

<212> PRT

<213> Homo sapiens

<400> 6224

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			20					25					30		
Ala	Glu	Gly	His	Val	Gly	Gln	Gly	Ala	Pro	Gly	Leu	Met	Gly	Asn	Met
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Pro	Gln	Pro	Pro	Pro	Glu	Glu	Pro	Ala	Gln	Ala	Ala	Met	Glu	Gly	Pro
				85				90					95		
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			100					105					110		
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<210> 6225

<211> 3851

<212> DNA

<213> Homo sapiens

<400> 6225

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<212> PRT

<213> Homo sapiens

<400> 6226

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Gln	Gly	Asp	Phe	Ile	Lys	Cys	Val	Glu	Gln	Lys	Thr	Asp	Ala	Leu	Gly
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Ile	Phe	Asn	Ile	Glu	Met	Val	Lys	Glu	Lys	Thr	Ala	Glu	Glu	Ile	Lys
65				70					75					80	
Gln	Ile	Trp	Gln	Gln	Tyr	Phe	Ala	Ala	Lys	Asp	Thr	Val	Tyr	Ala	Val
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		100					105						110		
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Gln	Val	Gln	Leu	Phe	Tyr	Ala	Thr	Asp	Arg	Lys	Glu	Thr	Tyr	Gly	Leu
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 <212> DNA  
 <213> Homo sapiens

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<210> 6228  
 <211> 271  
 <212> PRT  
 <213> Homo sapiens

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 Ile Pro Ser Pro Gly Arg Val Ala Ala Glu Trp Glu Val Gln Asn Arg  
 35 40 45  
 Ile Pro Ser Gly Thr Ile Leu Lys Ala Leu Met Glu Gly Gly Glu Asn  
 50 55 60  
 Gly Pro Trp Met Arg Phe Met Arg Ala Glu Ile Thr Ala Glu Gly Phe  
 65 70 75 80  
 Leu Arg Glu Phe Gly Arg Leu Cys Ser Glu Met Leu Lys Thr Ser Val

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			100			105			110											
Gln	Phe	Pro	Val	Met	Thr	Glu	Ala	Ile	Thr	Gln	Ile	Arg	Ala	Lys	Gly					
			115			120			125											
Leu	Gln	Thr	Ala	Val	Leu	Ser	Asn	Asn	Phe	Tyr	Leu	Pro	Asn	Gln	Lys					
			130			135			140											
Ser	Phe	Leu	Pro	Leu	Asp	Arg	Lys	Gln	Phe	Asp	Val	Ile	Val	Glu	Ser					
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Cys	Met	Glu	Gly	Ile	Cys	Lys	Pro	Asp	Pro	Arg	Ile	Tyr	Lys	Leu	Cys					
			165			170			175											
Leu	Glu	Gln	Leu	Gly	Leu	Gln	Pro	Ser	Glu	Ser	Ile	Phe	Leu	Asp	Asp					
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Leu	Gly	Thr	Asn	Leu	Lys	Glu	Ala	Ala	Arg	Leu	Gly	Ile	His	Thr	Ile					
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			210			215			220											
Gly	Phe	Thr	Leu	Arg	Val	Gly	Val	Pro	Asn	Thr	Arg	Pro	Val	Lys	Lys					
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Thr	Met	Glu	Ile	Pro	Lys	Asp	Ser	Leu	Gln	Lys	Tyr	Leu	Lys	Asp	Leu					
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<213> Homo sapiens

<400> 6229

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 3105

<210> 6230

<211> 944

<212> PRT

<213> Homo sapiens

<400> 6230

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			20					25					30		
Ser	Leu	Val	Ser	Ala	Leu	Asp	Ser	Met	Cys	Ser	Ala	Leu	Ser	Lys	Leu
		35					40					45			
Asn	Ala	Glu	Val	Ala	Cys	Val	Ala	Val	His	Asp	Glu	Ser	Ala	Phe	Val
	50					55				60					
Val	Gly	Thr	Glu	Lys	Gly	Arg	Met	Phe	Leu	Asn	Ala	Arg	Lys	Glu	Leu
65				70					75					80	
Gln	Ser	Asp	Phe	Leu	Arg	Phe	Cys	Arg	Gly	Pro	Pro	Trp	Lys	Asp	Pro
			85					90					95		
Glu	Ala	Glu	His	Pro	Lys	Lys	Val	Gln	Arg	Gly	Glu	Gly	Gly	Gly	Arg
			100					105					110		
Ser	Leu	Pro	Arg	Ser	Ser	Leu	Glu	His	Gly	Ser	Asp	Val	Tyr	Leu	Leu
		115				120					125				
Arg	Lys	Met	Val	Glu	Glu	Val	Phe	Asp	Val	Leu	Tyr	Ser	Glu	Ala	Leu
	130					135				140					
Gly	Arg	Ala	Ser	Val	Val	Pro	Leu	Pro	Tyr	Glu	Arg	Leu	Leu	Arg	Glu
145				150					155					160	
Pro	Gly	Leu	Leu	Ala	Val	Gln	Gly	Leu	Pro	Glu	Gly	Leu	Ala	Phe	Arg

[illegible]

595					600					605					
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610					615					620					
Lys	Ile	Leu	Glu	Ala	Ser	Asn	Ser	Ile	Gln	Phe	Val	Ile	Lys	Arg	Pro
625					630					635					
Glu	Leu	Leu	Thr	Glu	Gly	Val	Lys	Glu	Pro	Ile	Val	Asp	Ser	Gln	Glu
645					650					655					
Arg	Asp	Ser	Gly	Asp	Pro	Leu	Val	Asp	Glu	Ser	Leu	Lys	Arg	Gln	Gly
660					665					670					
Phe	Gln	Glu	Asn	Tyr	Asp	Ala	Arg	Leu	Ser	Arg	Ile	Asp	Ile	Ala	Asn
675					680					685					
Thr	Leu	Arg	Glu	Gln	Val	Gln	Asp	Leu	Phe	Asn	Lys	Lys	Tyr	Gly	Glu
690					695					700					
Ala	Leu	Gly	Ile	Lys	Tyr	Pro	Val	Gln	Val	Pro	Tyr	Lys	Arg	Ile	Lys
705					710					715					
Ser	Asn	Pro	Gly	Ser	Val	Ile	Ile	Glu	Gly	Leu	Pro	Pro	Gly	Ile	Pro
725					730					735					
Phe	Arg	Lys	Pro	Cys	Thr	Phe	Gly	Ser	Gln	Asn	Leu	Glu	Arg	Ile	Leu
740					745					750					
Ala	Val	Ala	Asp	Lys	Ile	Lys	Phe	Thr	Val	Thr	Arg	Pro	Phe	Gln	Gly
755					760					765					
Leu	Ile	Pro	Lys	Pro	Asp	Glu	Asp	Asp	Ala	Asn	Arg	Leu	Gly	Glu	Lys
770					775					780					
Val	Ile	Leu	Arg	Glu	Gln	Val	Lys	Glu	Leu	Phe	Asn	Glu	Lys	Tyr	Gly
785					790					795					
Glu	Ala	Leu	Gly	Leu	Asn	Arg	Pro	Val	Leu	Val	Pro	Tyr	Lys	Leu	Ile
805					810					815					
Arg	Asp	Ser	Pro	Asp	Ala	Val	Glu	Val	Thr	Gly	Leu	Pro	Asp	Asp	Ile
820					825					830					
Pro	Phe	Arg	Asn	Pro	Asn	Thr	Tyr	Asp	Ile	His	Arg	Leu	Glu	Lys	Ile
835					840					845					
Leu	Lys	Ala	Arg	Glu	His	Val	Arg	Met	Val	Ile	Ile	Asn	Gln	Leu	Gln
850					855					860					
Pro	Phe	Ala	Glu	Ile	Cys	Asn	Asp	Ala	Lys	Val	Pro	Ala	Lys	Asp	Ser
865					870					875					
Ser	Ile	Pro	Lys	Arg	Lys	Arg	Lys	Arg	Val	Ser	Glu	Gly	Asn	Ser	Val
885					890					895					
Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Asn	Pro	Asp	Ser
900					905					910					
Val	Ala	Ser	Ala	Asn	Gln	Ile	Ser	Leu	Val	Gln	Trp	Pro	Met	Tyr	Met
915					920					925					
Val	Asp	Tyr	Ala	Gly	Leu	Asn	Val	Gln	Leu	Pro	Gly	Pro	Leu	Asn	Tyr
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&lt;210&gt; 6231

&lt;211&gt; 471

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6231

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120

ttgcctttttt aaaaaaaaaa aaaaggctca aaaaaagagt atgctgggccc aaaaatctgg  
 180  
 cccctcaggc ctccctgacct ggaggagaaa aaggggccccg aagccccccg ttgcccccat  
 240  
 ctccatatgg aatggcacaa cccctcgagg ggaaccccc cctaaccata gttctaaaaa  
 300  
 ggggacaaaa aaatgggagc tggatttttc aacgccggaa acccaattcc caccctctgg  
 360  
 ccggccgttc ttagggattc caacttggga cccaacctgg gcgtattctg ggccttactt  
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<210> 6232

<211> 138

<212> PRT

<213> Homo sapiens

<400> 6232

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Gly	Asp	Arg	Thr	Arg	Pro	Cys	Leu	Phe	Lys	Lys	Lys	Lys	Lys	Ala	Gln
		20					25					30			
Lys	Lys	Ser	Met	Leu	Gly	Gln	Lys	Ser	Gly	Pro	Ser	Gly	Leu	Leu	Thr
		35				40						45			
Trp	Arg	Arg	Lys	Arg	Gly	Pro	Lys	Pro	Pro	Val	Ala	Pro	Ile	Ser	Ile
	50				55					60					
Trp	Asn	Gly	Thr	Thr	Pro	Arg	Gly	Glu	Pro	Pro	Pro	Asn	His	Ser	Ser
65					70				75					80	
Lys	Lys	Gly	Thr	Lys	Lys	Trp	Ala	Leu	Asp	Phe	Ser	Thr	Pro	Glu	Thr
			85					90						95	
Gln	Phe	Pro	Pro	Pro	Gly	Arg	Pro	Phe	Leu	Gly	Ile	Pro	Thr	Trp	Asp
		100					105						110		
Pro	Thr	Trp	Ala	Tyr	Ser	Gly	Pro	Tyr	Leu	Phe	Leu	Val	Gly	Ile	Gly
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Ile	Pro	Phe	Pro	Phe	Pro	Pro	Pro	Ser	Asn						
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<210> 6233

<211> 894

<212> DNA

<213> Homo sapiens

<400> 6233

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 120  
 agggaaggag acgattggag tcaactcaat gtgctcaaaa aaagaagagt cggggacctc  
 180  
 ctagccagtt acattccaga ggatgaggcg ctgatgcttc gggatggacg ctttgcttgt  
 240  
 gccatctgcc cccatcgacc ggtactggac accctggcca tgctgactgc ccaccgtgca  
 300



ggcaagaaac atctgtccag cttgcagctt ttctatggca agaagcagcc gggaaaggaa  
 360  
 agaaagcaga atccaaaaca tcagaatgaa ttgagaaggg aagaaaccaa agctgaggct  
 420  
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 480  
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 540  
 cctatgccac cctcagaggt caaactccaa agtggaaga tcagtaggga acctgaacct  
 600  
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 660  
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 720  
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 780  
 cctgatctcc ccttgactg ataccctttt cccattcatt cacaataaaa ttacaatggg  
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<210> 6234

<211> 230

<212> PRT

<213> Homo sapiens

<400> 6234

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			20					25					30		
Glu	Ala	Leu	Met	Leu	Arg	Asp	Gly	Arg	Phe	Ala	Cys	Ala	Ile	Cys	Pro
		35					40					45			
His	Arg	Pro	Val	Leu	Asp	Thr	Leu	Ala	Met	Leu	Thr	Ala	His	Arg	Ala
	50					55					60				
Gly	Lys	Lys	His	Leu	Ser	Ser	Leu	Gln	Leu	Phe	Tyr	Gly	Lys	Lys	Gln
65				70					75					80	
Pro	Gly	Lys	Glu	Arg	Lys	Gln	Asn	Pro	Lys	His	Gln	Asn	Glu	Leu	Arg
			85					90					95		
Arg	Glu	Glu	Thr	Lys	Ala	Glu	Ala	Pro	Leu	Leu	Thr	Gln	Thr	Arg	Leu
			100					105					110		
Ile	Thr	Gln	Ser	Ala	Leu	His	Arg	Ala	Pro	His	Tyr	Asn	Ser	Cys	Cys
		115					120					125			
Arg	Arg	Lys	Tyr	Arg	Pro	Glu	Ala	Pro	Gly	Pro	Ser	Val	Ser	Leu	Ser
	130					135					140				
Pro	Met	Pro	Pro	Ser	Glu	Val	Lys	Leu	Gln	Ser	Gly	Lys	Ile	Ser	Arg
145				150					155					160	
Glu	Pro	Glu	Pro	Ala	Ala	Gly	Pro	Gln	Ala	Glu	Glu	Ser	Ala	Thr	Val
			165					170						175	
Ser	Ala	Pro	Ala	Pro	Met	Ser	Pro	Thr	Arg	Arg	Arg	Ala	Leu	Asp	His
		180						185					190		
Tyr	Leu	Thr	Leu	Arg	Ser	Ser	Gly	Trp	Ile	Pro	Asp	Gly	Arg	Gly	Arg
	195						200					205			
Trp	Val	Lys	Asp	Glu	Asn	Val	Glu	Phe	Asp	Ser	Asp	Glu	Glu	Glu	Pro

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 Pro Asp Leu Pro Leu Asp  
 225  
 215  
 230  
 220

<210> 6235  
 <211> 3427  
 <212> DNA  
 <213> Homo sapiens

<400> 6235  
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 180  
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 240  
 aaaactctac ggcaccccaa catcctgggt tacatcgatg gactggagac agaaaaatgc  
 300  
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 360  
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 420  
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 780  
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 840  
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 900  
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 960  
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 1020  
 gttgtcctca cgcccccttt caaggtgggc aagttcctga gcgctgagga gtatcagcag  
 1080  
 aagatcatcc ctgtggtggc caagatgttc tcatccactg accgggccat gcgcatccgc  
 1140  
 ctctgcagc agatggagca gttcatccag taccttgacg agccaacagt caacaccag  
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 1260  
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 1320

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1380  
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1440  
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1680  
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1740  
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1800  
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1860  
gcccagccc ccacctgt tctgccacc cctacaacct caggccactg ggagacgcag  
1920  
gaggaggaca aggacacagc agaggacagc agcactgctg acagatggga cgacgaagac  
1980  
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2040  
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2100  
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2160  
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2220  
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2580  
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2940

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 3120  
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 3180  
 acggcgccgc ccggccgcgg cagcagcgg ccactcacgc agcgacactc gtctgaatcc  
 3240  
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 3300  
 gaggaggtgg agcagcccca ccacaagaag gagtgctacc tgaacttcga tgacacagtg  
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 3420  
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 3427

<210> 6236

<211> 820

<212> PRT

<213> Homo sapiens

<400> 6236

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Ala	Arg	Asp	Pro	Val	Arg	Asp	Phe	Pro	Phe	Glu	Leu	Ile	Pro	Glu	Pro
			20					25					30		
Pro	Glu	Gly	Gly	Leu	Pro	Gly	Pro	Trp	Ala	Leu	His	Arg	Gly	Arg	Lys
		35				40					45				
Lys	Ala	Thr	Gly	Ser	Pro	Val	Ser	Ile	Phe	Val	Tyr	Asp	Val	Lys	Pro
	50					55					60				
Gly	Ala	Glu	Glu	Gln	Thr	Gln	Val	Ala	Lys	Ala	Ala	Phe	Lys	Arg	Phe
65					70					75				80	
Lys	Thr	Leu	Arg	His	Pro	Asn	Ile	Leu	Ala	Tyr	Ile	Asp	Gly	Leu	Glu
				85					90					95	
Thr	Glu	Lys	Cys	Leu	His	Val	Val	Thr	Glu	Ala	Val	Thr	Pro	Leu	Gly
			100					105					110		
Ile	Tyr	Leu	Lys	Ala	Arg	Val	Glu	Ala	Gly	Gly	Leu	Lys	Glu	Leu	Glu
		115					120					125			
Ile	Ser	Trp	Gly	Leu	His	Gln	Ile	Val	Lys	Ala	Leu	Ser	Phe	Leu	Val
	130					135					140				
Asn	Asp	Cys	Ser	Leu	Ile	His	Asn	Asn	Val	Cys	Met	Ala	Ala	Val	Phe
145					150					155				160	
Val	Asp	Arg	Ala	Gly	Glu	Trp	Lys	Leu	Gly	Gly	Leu	Asp	Tyr	Met	Tyr
			165						170					175	
Ser	Ala	Gln	Gly	Asn	Gly	Gly	Gly	Pro	Pro	Arg	Lys	Gly	Ile	Pro	Glu
		180						185					190		
Leu	Glu	Gln	Tyr	Asp	Pro	Pro	Glu	Leu	Ala	Asp	Ser	Ser	Gly	Arg	Val
		195					200					205			
Val	Arg	Glu	Lys	Trp	Ser	Ala	Asp	Met	Trp	Arg	Leu	Gly	Cys	Leu	Ile
	210					215					220				
Trp	Glu	Val	Phe	Asn	Gly	Pro	Leu	Pro	Arg	Ala	Ala	Ala	Leu	Arg	Asn

225					230					235				240	
Pro	Gly	Lys	Ile	Pro	Lys	Thr	Leu	Val	Pro	His	Tyr	Cys	Glu	Leu	Val
				245					250					255	
Gly	Ala	Asn	Pro	Lys	Val	Arg	Pro	Asn	Pro	Ala	Arg	Phe	Leu	Gln	Asn
			260					265					270		
Cys	Arg	Ala	Pro	Gly	Gly	Phe	Met	Ser	Asn	Arg	Phe	Val	Glu	Thr	Asn
		275					280					285			
Leu	Phe	Leu	Glu	Glu	Ile	Gln	Ile	Lys	Glu	Pro	Ala	Glu	Lys	Gln	Lys
		290				295					300				
Phe	Phe	Gln	Glu	Leu	Ser	Lys	Ser	Leu	Asp	Ala	Phe	Pro	Glu	Asp	Phe
305					310					315					320
Cys	Arg	His	Lys	Val	Leu	Pro	Gln	Leu	Leu	Thr	Ala	Phe	Glu	Phe	Gly
				325					330					335	
Asn	Ala	Gly	Ala	Val	Val	Leu	Thr	Pro	Leu	Phe	Lys	Val	Gly	Lys	Phe
			340					345					350		
Leu	Ser	Ala	Glu	Glu	Tyr	Gln	Gln	Lys	Ile	Ile	Pro	Val	Val	Val	Lys
		355					360					365			
Met	Phe	Ser	Ser	Thr	Asp	Arg	Ala	Met	Arg	Ile	Arg	Leu	Leu	Gln	Gln
		370				375					380				
Met	Glu	Gln	Phe	Ile	Gln	Tyr	Leu	Asp	Glu	Pro	Thr	Val	Asn	Thr	Gln
385					390					395					400
Ile	Phe	Pro	His	Val	Val	His	Gly	Phe	Leu	Asp	Thr	Asn	Pro	Ala	Ile
				405					410					415	
Arg	Glu	Gln	Thr	Val	Lys	Ser	Met	Leu	Leu	Leu	Ala	Pro	Lys	Leu	Asn
			420					425					430		
Glu	Ala	Asn	Leu	Asn	Val	Glu	Leu	Met	Lys	His	Phe	Ala	Arg	Leu	Gln
		435					440					445			
Ala	Lys	Asp	Glu	Gln	Gly	Pro	Ile	Arg	Cys	Asn	Thr	Thr	Val	Cys	Leu
		450				455					460				
Gly	Lys	Ile	Gly	Ser	Tyr	Leu	Ser	Ala	Ser	Thr	Arg	His	Arg	Val	Leu
465					470					475					480
Thr	Ser	Ala	Phe	Ser	Arg	Ala	Thr	Arg	Asp	Pro	Phe	Ala	Pro	Ser	Arg
				485					490					495	
Val	Ala	Gly	Val	Leu	Gly	Phe	Ala	Ala	Thr	His	Asn	Leu	Tyr	Ser	Met
			500					505					510		
Asn	Asp	Cys	Ala	Gln	Lys	Ile	Leu	Pro	Val	Leu	Cys	Gly	Leu	Thr	Val
		515					520					525			
Asp	Pro	Glu	Lys	Ser	Val	Arg	Asp	Gln	Ala	Phe	Lys	Ala	Ile	Arg	Ser
		530				535					540				
Phe	Leu	Ser	Lys	Leu	Glu	Ser	Val	Ser	Glu	Asp	Pro	Thr	Gln	Leu	Glu
545					550					555					560
Glu	Val	Glu	Lys	Asp	Val	His	Ala	Ala	Ser	Ser	Pro	Gly	Met	Gly	Gly
				565					570					575	
Ala	Ala	Ala	Ser	Trp	Ala	Gly	Trp	Ala	Val	Thr	Gly	Val	Ser	Ser	Leu
			580					585					590		
Thr	Ser	Lys	Leu	Ile	Arg	Ser	His	Pro	Thr	Thr	Ala	Pro	Thr	Glu	Thr
		595					600						605		
Asn	Ile	Pro	Gln	Arg	Pro	Thr	Pro	Glu	Gly	Val	Pro	Ala	Pro	Ala	Pro
		610				615					620				
Thr	Pro	Val	Pro	Ala	Thr	Pro	Thr	Thr	Ser	Gly	His	Trp	Glu	Thr	Gln
625					630					635					640
Glu	Glu	Asp	Lys	Asp	Thr	Ala	Glu	Asp	Ser	Ser	Thr	Ala	Asp	Arg	Trp
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[illegible]

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<211> 494
<212> DNA
<213> Homo sapiens
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<210> 6238
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		20				25						30			
Ser	Thr	Pro	Lys	Asn	Gly	Met	Ser	Ser	Lys	Ser	Arg	Lys	Arg	Ile	Met
		35				40						45			
Pro	Asp	Pro	Val	Thr	Glu	Pro	Pro	Val	Thr	Asp	Pro	Val	Tyr	Glu	Ala
	50					55				60					
Leu	Leu	Tyr	Cys	Asn	Ile	Pro	Ser	Val	Ala	Glu	Arg	Ser	Met	Glu	Gly
65				70						75				80	
His	Ala	Pro	His	His	Phe	Lys	Leu	Val	Ser	Val	His	Val	Phe	Ile	Arg
			85						90					95	
His	Gly	Asp	Arg	Tyr	Pro	Leu	Tyr	Val	Ile	Pro	Lys	Thr	Lys	Arg	Pro
		100						105					110		
Glu	Ile	Asp	Cys	Thr	Leu	Val	Ala	Asn	Arg	Lys	Pro	Tyr	His	Pro	Lys
		115				120						125			
Leu	Glu	Ala	Phe	Ile	Ser	His	Met	Leu	Arg	Gly	Ser	Gly			
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&lt;210&gt; 6239

&lt;211&gt; 911

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6239

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911

<210> 6240

<211> 235

<212> PRT

<213> Homo sapiens

<400> 6240

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Leu Glu Leu Leu Ser Pro Phe Gln Leu Tyr Phe Asn Pro His Leu Val
          35          40          45
Phe Arg Lys Phe Gln Val Trp Arg Leu Val Thr Asn Phe Leu Phe Phe
          50          55          60
Gly Pro Leu Gly Phe Ser Phe Phe Phe Asn Met Leu Phe Val Phe Arg
65          70          75          80
Tyr Cys Arg Met Leu Glu Glu Gly Ser Phe Arg Gly Arg Thr Ala Asp
          85          90          95
Phe Val Phe Met Phe Leu Phe Gly Gly Val Leu Met Thr Leu Leu Gly
          100          105          110
Leu Leu Gly Ser Leu Phe Phe Leu Gly Gln Ala Leu Met Ala Met Leu
          115          120          125
Val Tyr Val Trp Ser Arg Arg Ser Pro Arg Val Arg Val Asn Phe Phe
          130          135          140
Gly Leu Leu Thr Phe Gln Ala Pro Phe Leu Pro Trp Ala Leu Met Gly
145          150          155          160
Phe Ser Leu Leu Leu Gly Asn Ser Ile Leu Val Asp Leu Leu Gly Ile
          165          170          175
Ala Val Gly His Ile Tyr Tyr Phe Leu Glu Asp Val Phe Pro Asn Gln
          180          185          190
Pro Gly Gly Lys Arg Leu Leu Gln Thr Pro Gly Phe Leu Lys Leu Leu
          195          200          205
Leu Asp Ala Pro Ala Glu Asp Pro Asn Tyr Leu Pro Leu Pro Glu Glu
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Gln Pro Gly Pro His Leu Pro Pro Pro Gln Gln
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<210> 6241

<211> 1515

<212> DNA

<213> Homo sapiens

<400> 6241

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240

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&lt;210&gt; 6242

&lt;211&gt; 245

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6242

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&lt;400&gt; 6244

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      20           25           30
Gly Phe Leu Leu Trp Lys Ala Ile Pro Ser Phe Ala Ser Ser Thr Leu
      35           40           45
Arg Met Ser Ser Ser Leu His Ser Leu Trp Phe Val Pro Leu Val Ser
      50           55           60
Glu Glu Glu Val Leu Ile Ile Leu Ser Gly Ser Glu Cys Ser Thr Cys
65           70           75           80
Pro Tyr Val Leu Ser Tyr Pro Thr Ser Ser Leu Thr Leu Phe His Gln
      85           90           95
Phe Leu Ser Phe Ser Pro Trp Arg
      100

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&lt;210&gt; 6245

&lt;211&gt; 6609

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6245

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960

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<210> 6246

<211> 1286

<212> PRT

<213> Homo sapiens

<400> 6246

Val	Leu	Asp	Asn	Gln	Ile	Lys	Lys	Asp	Leu	Ala	Asp	Lys	Glu	Thr	Leu
1				5					10					15	
Glu	Asn	Met	Met	Gln	Arg	His	Glu	Glu	Glu	Ala	His	Glu	Lys	Gly	Lys
				20				25					30		
Ile	Leu	Ser	Glu	Gln	Lys	Ala	Met	Ile	Asn	Ala	Met	Asp	Ser	Lys	Ile
				35				40					45		
Arg	Ser	Leu	Glu	Gln	Arg	Ile	Val	Glu	Leu	Ser	Glu	Ala	Asn	Lys	Leu
				50				55				60			
Ala	Ala	Asn	Ser	Ser	Leu	Phe	Thr	Gln	Arg	Asn	Met	Lys	Ala	Gln	Glu
65						70				75				80	
Glu	Met	Ile	Ser	Glu	Leu	Arg	Gln	Gln	Lys	Phe	Tyr	Leu	Glu	Thr	Gln
				85					90					95	
Ala	Gly	Lys	Leu	Glu	Ala	Gln	Asn	Arg	Lys	Leu	Glu	Glu	Gln	Leu	Glu
				100				105					110		
Lys	Ile	Ser	His	Gln	Asp	His	Ser	Asp	Lys	Asn	Arg	Leu	Leu	Glu	Leu
				115				120					125		
Glu	Thr	Arg	Leu	Arg	Glu	Val	Ser	Leu	Glu	His	Glu	Glu	Gln	Lys	Leu
				130				135					140		
Glu	Leu	Lys	Arg	Gln	Leu	Thr	Glu	Leu	Gln	Leu	Ser	Leu	Gln	Glu	Arg

145		150		155		160
Glu Ser Gln Leu Thr Ala Leu Gln Ala Ala Arg Ala Ala Leu Glu Ser						
	165		170		175	
Gln Leu Arg Gln Ala Lys Thr Glu Leu Glu Glu Thr Thr Ala Glu Ala						
	180		185		190	
Glu Glu Glu Ile Gln Ala Leu Thr Ala His Arg Asp Glu Ile Gln Arg						
	195		200		205	
Lys Phe Asp Ala Leu Arg Asn Ser Cys Thr Val Ile Thr Asp Leu Glu						
	210		215		220	
Glu Gln Leu Asn Gln Leu Thr Glu Asp Asn Ala Glu Leu Asn Asn Gln						
225	230		235		240	
Asn Phe Tyr Leu Ser Lys Gln Leu Asp Glu Ala Ser Gly Ala Asn Asp						
	245		250		255	
Glu Ile Val Gln Leu Arg Ser Glu Val Asp His Leu Arg Arg Glu Ile						
	260		265		270	
Thr Glu Arg Glu Met Gln Leu Thr Ser Gln Lys Gln Thr Met Glu Ala						
	275		280		285	
Leu Lys Thr Thr Cys Thr Met Leu Glu Glu Gln Val Met Asp Leu Glu						
	290		295		300	
Ala Leu Asn Asp Glu Leu Leu Glu Lys Glu Arg Gln Trp Glu Ala Trp						
305	310		315		320	
Arg Ser Val Leu Gly Asp Glu Lys Ser Gln Phe Glu Cys Arg Val Arg						
	325		330		335	
Glu Leu Gln Arg Met Leu Asp Thr Glu Lys Gln Ser Arg Ala Arg Ala						
	340		345		350	
Asp Gln Arg Ile Thr Glu Ser Arg Gln Val Val Glu Leu Ala Val Lys						
	355		360		365	
Glu His Lys Ala Glu Ile Leu Ala Leu Gln Gln Ala Leu Lys Glu Gln						
	370		375		380	
Lys Leu Lys Ala Glu Ser Leu Ser Asp Lys Leu Asn Asp Leu Glu Lys						
385	390		395		400	
Lys His Ala Met Leu Glu Met Asn Ala Arg Ser Leu Gln Gln Lys Leu						
	405		410		415	
Glu Thr Glu Arg Glu Leu Lys Gln Arg Leu Leu Glu Glu Gln Ala Lys						
	420		425		430	
Leu Gln Gln Gln Met Asp Leu Gln Lys Asn His Ile Phe Arg Leu Thr						
	435		440		445	
Gln Gly Leu Gln Glu Ala Leu Asp Arg Ala Asp Leu Leu Lys Thr Glu						
	450		455		460	
Arg Ser Asp Leu Glu Tyr Gln Leu Glu Asn Ile Gln Val Leu Tyr Ser						
465	470		475		480	
His Glu Lys Val Lys Met Glu Gly Thr Ile Ser Gln Gln Thr Lys Leu						
	485		490		495	
Ile Asp Phe Leu Gln Ala Lys Met Asp Gln Pro Ala Lys Lys Lys Lys						
	500		505		510	
Val Pro Leu Gln Tyr Asn Glu Leu Lys Leu Ala Leu Glu Lys Glu Lys						
	515		520		525	
Ala Arg Cys Ala Glu Leu Glu Glu Ala Leu Gln Lys Thr Arg Ile Glu						
	530		535		540	
Leu Arg Ser Ala Arg Glu Glu Ala Ala His Arg Lys Ala Thr Asp His						
545	550		555		560	
Pro His Pro Ser Thr Pro Ala Thr Ala Arg Gln Gln Ile Ala Met Ser						
	565		570		575	
Ala Ile Val Arg Ser Pro Glu His Gln Pro Ser Ala Met Ser Leu Leu						



			580				585				590				
Ala	Pro	Pro	Ser	Ser	Arg	Arg	Lys	Glu	Ser	Ser	Thr	Pro	Glu	Glu	Phe
		595					600					605			
Ser	Arg	Arg	Leu	Lys	Glu	Arg	Met	His	His	Asn	Ile	Pro	His	Arg	Phe
	610					615					620				
Asn	Val	Gly	Leu	Asn	Met	Arg	Ala	Thr	Lys	Cys	Ala	Val	Cys	Leu	Asp
625					630					635					640
Thr	Val	His	Phe	Gly	Arg	Gln	Ala	Ser	Lys	Cys	Leu	Glu	Cys	Gln	Val
				645					650					655	
Met	Cys	His	Pro	Lys	Cys	Ser	Thr	Cys	Leu	Pro	Ala	Thr	Cys	Gly	Leu
			660					665					670		
Pro	Ala	Glu	Tyr	Ala	Thr	His	Phe	Thr	Glu	Ala	Phe	Cys	Arg	Asp	Lys
		675					680					685			
Met	Asn	Ser	Pro	Gly	Leu	Gln	Thr	Lys	Glu	Pro	Ser	Ser	Ser	Leu	His
	690					695					700				
Leu	Glu	Gly	Trp	Met	Lys	Val	Pro	Arg	Asn	Asn	Lys	Arg	Gly	Gln	Gln
705					710					715					720
Gly	Trp	Asp	Arg	Lys	Tyr	Ile	Val	Leu	Glu	Gly	Ser	Lys	Val	Leu	Ile
				725					730					735	
Tyr	Asp	Asn	Glu	Ala	Arg	Glu	Ala	Gly	Gln	Arg	Pro	Val	Glu	Glu	Phe
			740					745					750		
Glu	Leu	Cys	Leu	Pro	Asp	Gly	Asp	Val	Ser	Ile	His	Gly	Ala	Val	Gly
		755					760					765			
Ala	Ser	Glu	Leu	Ala	Asn	Thr	Ala	Lys	Ala	Asp	Val	Pro	Tyr	Ile	Leu
	770					775					780				
Lys	Met	Glu	Ser	His	Pro	His	Thr	Thr	Cys	Trp	Pro	Gly	Arg	Thr	Leu
785					790					795					800
Tyr	Leu	Leu	Ala	Pro	Ser	Phe	Pro	Asp	Lys	Gln	Arg	Trp	Val	Thr	Ala
				805					810					815	
Leu	Glu	Ser	Val	Val	Ala	Gly	Gly	Arg	Val	Ser	Arg	Glu	Lys	Ala	Glu
			820					825					830		
Ala	Asp	Ala	Lys	Leu	Leu	Gly	Asn	Ser	Leu	Leu	Lys	Leu	Glu	Gly	Asp
		835					840					845			
Asp	Arg	Leu	Asp	Met	Asn	Cys	Thr	Leu	Pro	Phe	Ser	Asp	Gln	Val	Val
	850					855					860				
Leu	Val	Gly	Thr	Glu	Glu	Gly	Leu	Tyr	Ala	Leu	Asn	Val	Leu	Lys	Asn
865					870					875					880
Ser	Leu	Thr	His	Val	Pro	Gly	Ile	Gly	Ala	Val	Phe	Gln	Ile	Tyr	Ile
				885					890					895	
Ile	Lys	Asp	Leu	Glu	Lys	Leu	Leu	Met	Ile	Ala	Gly	Glu	Glu	Arg	Ala
			900					905					910		
Leu	Cys	Leu	Val	Asp	Val	Lys	Lys	Val	Lys	Gln	Ser	Leu	Ala	Gln	Ser
		915					920					925			
His	Leu	Pro	Ala	Gln	Pro	Asp	Ile	Ser	Pro	Asn	Ile	Phe	Glu	Ala	Val
	930					935					940				
Lys	Gly	Cys	His	Leu	Phe	Gly	Ala	Gly	Lys	Ile	Glu	Asn	Gly	Leu	Cys
945					950					955					960
Ile	Cys	Ala	Ala	Met	Pro	Ser	Lys	Val	Val	Ile	Leu	Arg	Tyr	Asn	Glu
				965					970					975	
Asn	Leu	Ser	Lys	Tyr	Cys	Ile	Arg	Lys	Glu	Ile	Glu	Thr	Ser	Glu	Pro
			980					985					990		
Cys	Ser	Cys	Ile	His	Phe	Thr	Asn	Tyr	Ser	Ile	Leu	Ile	Gly	Thr	Asn
		995					1000					1005			
Lys	Phe	Tyr	Glu	Ile	Asp	Met	Lys	Gln	Tyr	Thr	Leu	Glu	Glu	Phe	Leu

1010	1015	1020
Asp Lys Asn Asp His Ser Leu Ala Pro Ala Val Phe Ala Ala Ser Ser		
1025	1030	1035
Asn Ser Phe Pro Val Ser Ile Val Gln Val Asn Ser Ala Gly Gln Arg		1040
	1045	1050
Glu Glu Tyr Leu Leu Cys Phe His Glu Phe Gly Val Phe Val Asp Ser		1055
	1060	1065
Tyr Gly Arg Arg Ser Arg Thr Asp Asp Leu Lys Trp Ser Arg Leu Pro		1070
	1075	1080
Leu Ala Phe Ala Tyr Arg Glu Pro Tyr Leu Phe Val Thr His Phe Asn		1085
	1090	1095
Ser Leu Glu Val Ile Glu Ile Gln Ala Arg Ser Ser Ala Gly Thr Pro		1100
1105	1110	1115
Ala Arg Ala Tyr Leu Asp Ile Pro Asn Pro Arg Tyr Leu Gly Pro Ala		1120
	1125	1130
Ile Ser Ser Gly Ala Ile Tyr Leu Ala Ser Ser Tyr Gln Asp Lys Leu		1135
	1140	1145
Arg Val Ile Cys Cys Lys Gly Asn Leu Val Lys Glu Ser Gly Thr Glu		1150
	1155	1160
His His Arg Gly Pro Ser Thr Ser Arg Ser Ser Pro Asn Lys Arg Gly		1165
	1170	1175
Pro Pro Thr Tyr Asn Glu His Ile Thr Lys Arg Val Ala Ser Ser Pro		1180
1185	1190	1195
Ala Pro Pro Glu Gly Pro Ser His Pro Arg Glu Pro Ser Thr Pro His		1200
	1205	1210
Arg Tyr Arg Glu Gly Arg Thr Glu Leu Arg Arg Asp Lys Ser Pro Gly		1215
	1220	1225
Arg Pro Leu Glu Arg Glu Lys Ser Pro Gly Arg Met Leu Ser Thr Arg		1230
	1235	1240
Arg Glu Arg Ser Pro Gly Arg Leu Phe Glu Asp Ser Ser Arg Gly Arg		1245
	1250	1255
Leu Pro Ala Gly Ala Val Arg Thr Pro Leu Ser Gln Val Asn Lys Val		1260
1265	1270	1275
Trp Asp Gln Ser Ser Val		1280
	1285	

&lt;210&gt; 6247

&lt;211&gt; 497

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6247

gcggccgcag cgctgaatgg ggtggaccga cgttccctgc agcgttcaca aggctggctc  
60  
tagaagtgcg ggagagggcc aagaggaggg cggaggactg gcatgccctg gagcgtccca  
120  
aaggctgcag gggggctcctt gcccgaggag cgcacacact agagaaacag ccggcagccg  
180  
gccgcagcgc cgttctcccg ggagagaaat attattcatc tgtgccagag gaaggagggg  
240  
caacccatgt ctatcgttat cacagaggcg agtcgaagct gcacatgtgc ttggacatag  
300  
ggaatggtca gagaaaagac agaaaaaaga catcccttgg tcctggaggc agctatcaaa  
360

tatcagagca tgctccagag gcatcccagc ctgtgagtac ggaactgctt acgcactggg  
 420  
 tttcaccacc gttgcaactc catgaaccag ttgacatggg tcttagaggg ctatttgaat  
 480  
 tgagtctata gtatttt  
 497

<210> 6248

<211> 142

<212> PRT

<213> Homo sapiens

<400> 6248

Met	Gly	Trp	Thr	Asp	Val	Pro	Cys	Ser	Val	His	Lys	Ala	Gly	Ser	Arg
1				5					10					15	
Ser	Ala	Gly	Glu	Gly	Gln	Glu	Glu	Gly	Gly	Gly	Leu	Ala	Cys	Pro	Gly
			20					25					30		
Ala	Ser	Gln	Arg	Leu	His	Gly	Gly	Pro	Cys	Pro	Gly	Gly	Ala	Pro	Pro
		35				40						45			
Arg	Glu	Thr	Ala	Gly	Ser	Arg	Pro	Ala	Ala	Arg	Ser	Pro	Gly	Arg	Glu
	50					55					60				
Ile	Leu	Phe	Ile	Cys	Ala	Arg	Gly	Arg	Arg	Gly	Asn	Pro	Cys	Leu	Ser
65					70					75				80	
Leu	Ser	Gln	Arg	Arg	Val	Glu	Ala	Ala	His	Val	Leu	Gly	His	Arg	Glu
			85						90					95	
Trp	Ser	Glu	Lys	Arg	Gln	Lys	Lys	Asp	Ile	Pro	Trp	Ser	Trp	Arg	Gln
			100					105					110		
Leu	Ser	Asn	Ile	Arg	Ala	Cys	Ser	Arg	Gly	Ile	Pro	Ala	Cys	Glu	Tyr
		115					120					125			
Gly	Thr	Ala	Tyr	Ala	Leu	Gly	Phe	Thr	Thr	Val	Ala	Thr	Pro		
	130					135					140				

<210> 6249

<211> 1217

<212> DNA

<213> Homo sapiens

<400> 6249

nntgagcaac aaaccgagtt ctggagaacg ccatcagctc gctgcttaaa ctggaaacaa  
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 aagtctcaac ttccaacctc tttgcagcta ggagtggcca agtagcatag atctggtgaa  
 120  
 tgaactgcag gtgggaattt ctgagaaggt ttccttctta aatagaaaga ttaaaccaca  
 180  
 ggttccatta tgggtcgact tgatgggaaa gtcacatccc tgacggccgc tgctcagggg  
 240  
 attggccaag cagctgcctt agcttttgca agagaaggtg ccaaagtcac agccacagac  
 300  
 attaattgagt ccaaacttca ggaactggaa aagtaccggg gtattcaaac tcgtgtcctt  
 360  
 gatgtcacia agaagaaaca aattgatcag tttgccaatg aagttgagag acttgatgtt  
 420  
 ctctttaatg ttgctgggtt tgtccatcat ggaactgtcc tggattgtga ggagaaagac  
 480

tgggacttct cgatgaatct caatgtgcgc agcatgtacc tgatgatcaa ggcattcctt  
 540  
 cctaaaatgc ttgctcagaa atctggcaat attatcaaca tgtcttctgt ggcttccagc  
 600  
 gtcaaaggag ttgtgaacag atgtgtgtac agcacaacca aggcagccgt gattggcctc  
 660  
 acaaaatctg tggctgcaga tttcatccag cagggcatca ggtgcaactg tgtgtgcccc  
 720  
 ggaacagttg atacgccatc tctacaagaa agaatacaag ccagaggaaa tcctgaagag  
 780  
 gcacggaatg atttcctgaa gagacaaaag acgggaagat tcgcaactgc agaagaaata  
 840  
 gccatgctct gcgtgtatct ggcttctgat gaatctgctt atgtaactgg taaccctgtc  
 900  
 atcattgatg gaggctggag cttgtgatct taggatctcc atggtgggaa ggaaggcagg  
 960  
 cctttcctat ccacagtga cctgggttacg aagaaaactc accaatcatc tccttcctgt  
 1020  
 taatcacatg ttaatgaaaa taagctcttt ttaatgatgt cactgtttgc aagagtctga  
 1080  
 ttctttaagt atattaatct ctttctaatac tcttctgaaa tcattgtaaa gaaataaaaa  
 1140  
 tattgaactc atagcaggag aatagttttt aaaataaatc tcgatttggt agcaaaaaaa  
 1200  
 aaaaaaaaaa aaaaaaa  
 1217

&lt;210&gt; 6250

&lt;211&gt; 245

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6250

Met	Gly	Arg	Leu	Asp	Gly	Lys	Val	Ile	Ile	Leu	Thr	Ala	Ala	Ala	Gln
1			5					10					15		
Gly	Ile	Gly	Gln	Ala	Ala	Ala	Leu	Ala	Phe	Ala	Arg	Glu	Gly	Ala	Lys
			20					25					30		
Val	Ile	Ala	Thr	Asp	Ile	Asn	Glu	Ser	Lys	Leu	Gln	Glu	Leu	Glu	Lys
			35				40					45			
Tyr	Pro	Gly	Ile	Gln	Thr	Arg	Val	Leu	Asp	Val	Thr	Lys	Lys	Lys	Gln
			50			55					60				
Ile	Asp	Gln	Phe	Ala	Asn	Glu	Val	Glu	Arg	Leu	Asp	Val	Leu	Phe	Asn
65					70					75					80
Val	Ala	Gly	Phe	Val	His	His	Gly	Thr	Val	Leu	Asp	Cys	Glu	Glu	Lys
				85					90					95	
Asp	Trp	Asp	Phe	Ser	Met	Asn	Leu	Asn	Val	Arg	Ser	Met	Tyr	Leu	Met
			100					105					110		
Ile	Lys	Ala	Phe	Leu	Pro	Lys	Met	Leu	Ala	Gln	Lys	Ser	Gly	Asn	Ile
			115				120						125		
Ile	Asn	Met	Ser	Ser	Val	Ala	Ser	Ser	Val	Lys	Gly	Val	Val	Asn	Arg
			130			135					140				
Cys	Val	Tyr	Ser	Thr	Thr	Lys	Ala	Ala	Val	Ile	Gly	Leu	Thr	Lys	Ser
145					150					155					160
Val	Ala	Ala	Asp	Phe	Ile	Gln	Gln	Gly	Ile	Arg	Cys	Asn	Cys	Val	Cys



caggggtcccc caatccctac aattctcctg agtccctcac caccatggag gacccttgct  
 1140  
 aggggtctacc gggagagtca ccacatctat tatgaggcaa gggcactggg atatgttccc  
 1200  
 accatcccct aaacacaaga gtaggctagg ggagcgtgca ggcagcccc gctcacggcc  
 1260  
 aggcctgcag cccaacccat gggcccttc gcaactgggag tccacgtgag ctcagtacca  
 1320  
 cggggaagga tagagaaggg aacagggttaa cgcgctgta cagcacctca gagaagccac  
 1380  
 tgagacggga gagaaagagc caggtctaga aaggcctccc atcaccggca gcagagaggg  
 1440  
 actggtgggc tgaaagggga cagggactgg caggaggggc ttccctgcct gggggtgagg  
 1500  
 agggagctca cgtgtgggct gtggattcct tgctgtccag ccaggctggg ggcagggagt  
 1560  
 ggccatggac tgagccacct agagatggga gagaagttgg tatgggtaan a  
 1611

&lt;210&gt; 6252

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6252

Met	Gly	Gly	Arg	Pro	Leu	Gly	Lys	Gly	Leu	Cys	Leu	Ala	Ser	Gly	Arg
1				5				10						15	
Ala	Lys	Ser	Ser	Lys	Gly	Lys	Gly	Arg	Gly	His	Ser	Gly	Glu	Asn	Ser
		20						25					30		
Ile	Ser	Gly	Lys	Thr	Gly	Ile	His	Phe	Lys	Ile	Ser	Ala	Gln	Lys	Gly
		35					40					45			
Ser	Arg	Ala	Val	Leu	Lys	Pro	Gly	Arg	Gln	Gly	Pro	Pro	Ile	Pro	Thr
	50					55					60				
Ile	Leu	Leu	Ser	Pro	Ser	Pro	Pro	Trp	Arg	Thr	Leu	Ala	Arg	Val	Tyr
65				70					75					80	
Arg	Glu	Ser	His	His	Ile	Tyr	Tyr	Glu	Ala	Arg	Ala	Leu	Gly	Tyr	Val
			85					90					95		
Pro	Thr	Ile	Pro												
			100												

&lt;210&gt; 6253

&lt;211&gt; 1953

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6253

nngtggggta gcgggcaagg cgggcgccga gtttgcaaag gctcgcagcg gccagaaacc  
 60  
 cggctccgag cggcggcggc ccggcttcog ctgcccgtga gctaaggacg gtccgctccc  
 120  
 tctagccagc tccgaatcct gatccaggcg ggggccaggg gccctcgcg tcccctctga  
 180  
 ggaccgaaga tgagcttcct cttcagcagc cgctcttcta aaacattcaa accaaagaag  
 240

aatatccctg aaggatctca tcagtatgaa ctcttaaaac atgcagaagc aactctagga  
300  
agtgggaatc tgagacaagc tgttatgttg cctgaggag aggatctcaa tgaatggatt  
360  
gctgtgaaca ctgtggattt ctttaaccag atcaacatgt tatatggaac tattacagaa  
420  
ttctgcactg aagcaagctg tccagtcagc tctgcaggtc cgagatatga atatcactgg  
480  
gcagatggta ctaatattaa aaagccaatc aaatgttctg caccaaaata cattgactat  
540  
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660  
gtttatgccc atatttatca ccagcacttt gattctgtga tgcagctgca agaggaggcc  
720  
cacctcaaca cctcctttaa gcactttatt ttctttgttc aggagttaa tctgattgat  
780  
aggcgtgagc tggcacctct tcaagaatta atagagaaac ttggatcaaa agacagataa  
840  
atgtttcttc tagaacacag ttacccctt gcttcatcta ttgctagaac tatctcattg  
900  
ctatctgtta tagactagt atacaaactt taagaaaaca ggataaaaag ataccattg  
960  
cctgtgtcta ctgataaaat tatcccaaag gtaggttggt gtgatagttt ccgagtaaga  
1020  
ccttaaggac acagccaaat cttaagtact gtgtgaccac tcttggtgtt atcacatagt  
1080  
catacttggg tgtaatatgt gatggttaac ctgtagctta taaatttact tattattctt  
1140  
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1200  
cacaatggac attaagaatt tccatcaata atttatgaat aagtttccag aacaaatttc  
1260  
ctaataacac aatcagattg gttttattct tttattttac gaataaaaaa tgtatttttc  
1320  
agtacccttg agatttagaa catctgtgtc acttcagata acattttagt ttcaagtttg  
1380  
tatggtagtg tttttataga taagatacgt ctattttttc aaaattcatg attgcagttt  
1440  
aaatcatcat atgacgtgtg ggtgggagca accaaagtta tttttacagg gactttattt  
1500  
tttgatcttt atttgagatt gttttcatat ctatctaaat tattaggagt gtgtgtatca  
1560  
gaagtaattt tttaatgtct tctaaggatg gtcttccagg cttttaaact gaaaagctta  
1620  
attcagatag tagcttttgg ctgagaaaag gaatccaaaa tattaataaa tttagatctc  
1680  
aaaaccacta tttttattat ttcatattt ttcagaggcc ttaaaattct gggtagaga  
1740  
atggaggaaa atactcagag tacttgatta tttattttcc ttttattaaa aaattacttc  
1800  
tatgttttta ttgtctcttg agccttagtt aagagtagtg tagaaatgca tgaacttcat  
1860

cctaataagg ataaaactta aggaaaacca caataaacca tgaagggtga cacatcttaa  
 1920  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa  
 1953

<210> 6254  
 <211> 216  
 <212> PRT  
 <213> Homo sapiens

<400> 6254  
 Met Ser Phe Leu Phe Ser Ser Arg Ser Ser Lys Thr Phe Lys Pro Lys  
 1 5 10 15  
 Lys Asn Ile Pro Glu Gly Ser His Gln Tyr Glu Leu Leu Lys His Ala  
 20 25 30  
 Glu Ala Thr Leu Gly Ser Gly Asn Leu Arg Gln Ala Val Met Leu Pro  
 35 40 45  
 Glu Gly Glu Asp Leu Asn Glu Trp Ile Ala Val Asn Thr Val Asp Phe  
 50 55 60  
 Phe Asn Gln Ile Asn Met Leu Tyr Gly Thr Ile Thr Glu Phe Cys Thr  
 65 70 75 80  
 Glu Ala Ser Cys Pro Val Met Ser Ala Gly Pro Arg Tyr Glu Tyr His  
 85 90 95  
 Trp Ala Asp Gly Thr Asn Ile Lys Lys Pro Ile Lys Cys Ser Ala Pro  
 100 105 110  
 Lys Tyr Ile Asp Tyr Leu Met Thr Trp Val Gln Asp Gln Leu Asp Asp  
 115 120 125  
 Glu Thr Leu Phe Pro Ser Lys Ile Gly Val Pro Phe Pro Lys Asn Phe  
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1920  
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1980  
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2160

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<210> 6264  
 <211> 654  
 <212> PRT  
 <213> Homo sapiens

<400> 6264  
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 Asn Asn Trp Asp Leu Val Ala Ala Ile Asn Gly Val Ile Pro Gln Glu  
 35 40 45  
 Asn Gly Ile Leu Gln Ser Glu Tyr Gly Gly Glu Thr Ile Pro Gly Pro  
 50 55 60  
 Ala Phe Asn Pro Ala Ser His Pro Ala Ser Ala Pro Thr Ser Ser Ser  
 65 70 75 80  
 Ser Ser Ala Phe Arg Pro Val Met Pro Ser Arg Gln Ile Val Glu Arg  
 85 90 95  
 Gln Pro Arg Met Leu Asp Phe Arg Val Glu Tyr Arg Asp Arg Asn Val  
 100 105 110  
 Asp Val Val Leu Glu Asp Thr Cys Thr Val Gly Glu Ile Lys Gln Ile  
 115 120 125  
 Leu Glu Asn Glu Leu Gln Ile Pro Val Ser Lys Met Leu Leu Lys Gly  
 130 135 140  
 Trp Lys Thr Gly Asp Val Glu Asp Ser Thr Val Leu Lys Ser Leu His  
 145 150 155 160  
 Leu Pro Lys Asn Asn Ser Leu Tyr Val Leu Thr Pro Asp Leu Pro Pro  
 165 170 175  
 Pro Ser Ser Ser Ser His Ala Gly Ala Leu Gln Glu Ser Leu Asn Gln  
 180 185 190  
 Asn Phe Met Leu Ile Ile Thr His Arg Glu Val Gln Arg Glu Tyr Asn  
 195 200 205  
 Leu Asn Phe Ser Gly Ser Ser Thr Ile Gln Glu Val Lys Arg Asn Val  
 210 215 220  
 Tyr Asp Leu Thr Ser Ile Pro Val Arg His Gln Leu Trp Glu Gly Trp  
 225 230 235 240  
 Pro Thr Ser Ala Thr Asp Asp Ser Met Cys Leu Ala Glu Ser Gly Leu  
 245 250 255  
 Ser Tyr Pro Cys His Arg Leu Thr Val Gly Arg Arg Ser Ser Pro Ala  
 260 265 270  
 Gln Thr Arg Glu Gln Ser Glu Glu Gln Ile Thr Asp Val His Met Val

275	280	285
Ser Asp Ser Asp Gly Asp Asp Phe Glu Asp Ala Thr Glu Phe Gly Val		
290	295	300
Asp Asp Gly Glu Val Phe Gly Met Ala Ser Ser Ala Leu Arg Lys Ser		
305	310	315
Pro Met Ile Cys Phe Leu Val Pro Glu Asn Ala Glu Asn Glu Gly Asp		
	325	330
Ala Leu Leu Gln Phe Thr Ala Glu Phe Ser Ser Arg Tyr Gly Asp Cys		
	340	345
His Pro Val Phe Phe Ile Gly Ser Leu Glu Ala Ala Phe Gln Glu Ala		
	355	360
Phe Tyr Val Lys Ala Arg Asp Arg Lys Leu Leu Ala Ile Tyr Leu His		
	370	375
His Asp Glu Ser Val Leu Thr Asn Val Phe Cys Ser Gln Met Leu Cys		
385	390	395
Ala Glu Ser Ile Val Ser Tyr Leu Ser Gln Asn Phe Ile Thr Trp Ala		
	405	410
Trp Asp Leu Thr Lys Asp Ser Asn Arg Ala Arg Phe Leu Thr Met Cys		
	420	425
Asn Arg His Phe Gly Ser Val Val Ala Gln Thr Ile Arg Thr Gln Lys		
	435	440
Thr Asp Gln Phe Pro Leu Phe Leu Ile Ile Met Gly Lys Arg Ser Ser		
	450	455
Asn Glu Val Leu Asn Val Ile Gln Gly Asn Thr Thr Val Asp Glu Leu		
465	470	475
Met Met Arg Leu Met Ala Ala Met Glu Ile Phe Thr Ala Gln Gln Gln		
	485	490
Glu Asp Ile Lys Asp Glu Asp Glu Arg Glu Ala Arg Glu Asn Val Lys		
	500	505
Arg Glu Gln Asp Glu Ala Tyr Arg Leu Ser Leu Glu Ala Asp Arg Ala		
	515	520
Lys Arg Glu Ala His Glu Arg Glu Met Ala Glu Gln Phe Arg Leu Glu		
	530	535
Gln Ile Arg Lys Glu Gln Glu Glu Glu Arg Glu Ala Ile Arg Leu Ser		
545	550	555
Leu Glu Gln Ala Leu Pro Pro Glu Pro Lys Glu Glu Asn Ala Glu Pro		
	565	570
Val Ser Lys Leu Arg Ile Arg Thr Pro Ser Gly Glu Phe Leu Glu Arg		
	580	585
Arg Phe Leu Ala Ser Asn Lys Leu Gln Ile Val Phe Asp Phe Val Ala		
	595	600
Ser Lys Gly Phe Pro Trp Asp Glu Tyr Lys Leu Leu Ser Thr Phe Pro		
	610	615
Arg Arg Asp Val Thr Gln Leu Asp Pro Asn Lys Ser Leu Leu Glu Val		
625	630	635
Lys Leu Phe Pro Gln Glu Thr Leu Phe Leu Glu Ala Lys Glu		
	645	650

&lt;210&gt; 6265

&lt;211&gt; 1344

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6265

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tctgtggagg aagagatgca aagtacagtt cgagagcaca gagatggagg tcatgcaggt  
180  
ggaatcttca acagatacaa tattctcaag attcagaagg tttgtaacaa gaaactatgg  
240  
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300  
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360  
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420  
aaaagcaatc aatatgtata tggaattgga ggaggtagctg ggtgtccagt tcacaaagac  
480  
agatcttgtt acatttgcca caggcagctg ctcttttgcc gggtaacctt gggaaaagtct  
540  
ttcctgcagt tcagtgcatt gaaaatggca cattctctc caggatcatca ctcatgact  
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1020  
tctaacaac tgtaatgccc tcaacagaac taattttact aatacaatac tgtgttcttt  
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1140  
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gtttacaaaa ttttttcata tgtattgttc atctatactt catcttacat cgtcatgatt  
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1320  
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1344

&lt;210&gt; 6266

&lt;211&gt; 240

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6266

Xaa Ala Leu Pro Ala Ser His Arg Pro Gly Gln Gln Gly Leu Asn Pro

1		5		10		15									
Tyr	Leu	Thr	Leu	Asn	Thr	Ser	Gly	Ser	Gly	Thr	Ile	Leu	Ile	Asp	Leu
		20						25					30		
Ser	Pro	Asp	Asp	Lys	Glu	Phe	Gln	Ser	Val	Glu	Glu	Glu	Met	Gln	Ser
		35					40					45			
Thr	Val	Arg	Glu	His	Arg	Asp	Gly	Gly	His	Ala	Gly	Gly	Ile	Phe	Asn
	50					55					60				
Arg	Tyr	Asn	Ile	Leu	Lys	Ile	Gln	Lys	Val	Cys	Asn	Lys	Lys	Leu	Trp
65					70					75					80
Glu	Arg	Tyr	Thr	His	Arg	Arg	Lys	Glu	Val	Ser	Glu	Glu	Asn	His	Asn
			85						90					95	
His	Ala	Asn	Glu	Arg	Met	Leu	Phe	His	Gly	Ser	Pro	Phe	Val	Asn	Ala
		100						105					110		
Ile	Ile	His	Lys	Gly	Phe	Asp	Glu	Arg	His	Ala	Tyr	Ile	Gly	Gly	Met
		115					120					125			
Phe	Gly	Ala	Gly	Ile	Tyr	Phe	Ala	Glu	Asn	Ser	Ser	Lys	Ser	Asn	Gln
	130					135					140				
Tyr	Val	Tyr	Gly	Ile	Gly	Gly	Gly	Thr	Gly	Cys	Pro	Val	His	Lys	Asp
145				150						155					160
Arg	Ser	Cys	Tyr	Ile	Cys	His	Arg	Gln	Leu	Leu	Phe	Cys	Arg	Val	Thr
			165					170						175	
Leu	Gly	Lys	Ser	Phe	Leu	Gln	Phe	Ser	Ala	Met	Lys	Met	Ala	His	Ser
		180						185					190		
Pro	Pro	Gly	His	His	Ser	Val	Thr	Gly	Arg	Pro	Ser	Val	Asn	Gly	Leu
		195					200					205			
Ala	Leu	Ala	Glu	Tyr	Val	Ile	Tyr	Arg	Gly	Glu	Gln	Ala	Tyr	Pro	Glu
	210					215					220				
Tyr	Leu	Ile	Thr	Tyr	Gln	Ile	Met	Arg	Pro	Glu	Gly	Met	Val	Asp	Gly
225					230					235					240

&lt;210&gt; 6267

&lt;211&gt; 328

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6267

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120

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180

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240

gcacgggtacc cgtgcgacgt ggaggactgc gaggtcttgg gcgccctggt gtgccgcgtg

300

cagcttgggc cctaccagcc cggccggc

328

&lt;210&gt; 6268

&lt;211&gt; 83

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6268

Ala Glu Trp Gly Cys Pro Ala Val Thr Gln Pro Leu Ser Pro Asp Glu  
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 Pro Phe Leu Gln Phe Arg Arg Asn Val Phe Phe Pro Lys Arg Arg Glu  
 20 25 30  
 Leu Gln Ile His Asp Glu Glu Val Leu Arg Leu Leu Tyr Glu Glu Ala  
 35 40 45  
 Lys Gly Asn Val Leu Ala Ala Arg Tyr Pro Cys Asp Val Glu Asp Cys  
 50 55 60  
 Glu Ala Leu Gly Ala Leu Val Cys Arg Val Gln Leu Gly Pro Tyr Gln  
 65 70 75 80  
 Pro Gly Arg

&lt;210&gt; 6269

&lt;211&gt; 923

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6269

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 120  
 aacgtgatgg ttctccagga cgaaaatttt gtcagtaaag aagagttcca ggcagtggag  
 180  
 aagaagctgg tggaagagaa agctgcccat gccaaaacca aggtcctcct ggccaaggaa  
 240  
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 720  
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 780  
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 923

&lt;210&gt; 6270

<211> 307  
 <212> PRT  
 <213> Homo sapiens

<400> 6270

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Glu Glu Leu Ile His Gln Leu Arg Asn Val Met Val Leu Gln Asp Glu
      35           40           45
Asn Phe Val Ser Lys Glu Glu Phe Gln Ala Val Glu Lys Lys Leu Val
      50           55           60
Glu Glu Lys Ala Ala His Ala Lys Thr Lys Val Leu Leu Ala Lys Glu
      65           70           75           80
Glu Glu Lys Leu Gln Phe Ala Leu Gly Glu Val Glu Val Leu Ser Lys
      85           90           95
Gln Leu Glu Lys Glu Lys Leu Ala Phe Glu Lys Ala Leu Ser Ser Val
      100          105          110
Lys Ser Lys Val Leu Gln Glu Ser Ser Lys Lys Asp Gln Leu Ile Thr
      115          120          125
Lys Cys Asn Glu Ile Glu Ser His Ile Ile Lys Gln Glu Asp Ile Leu
      130          135          140
Asn Gly Lys Glu Asn Glu Ile Lys Glu Leu Gln Gln Val Ile Ser Gln
      145          150          155          160
Gln Lys Gln Ile Phe Ser Pro Pro Pro Ala Gly Ser Val Ala Gly Ile
      165          170          175
Thr Cys Leu Thr Ser Gly Ser Arg Ser Ser Arg Lys Ala Thr Trp Pro
      180          185          190
Arg Cys Trp Thr Arg Ser Ile Arg Lys Pro Gln Gly His Val Arg Pro
      195          200          205
Ala Ala Thr Ser Ile Pro Gly Lys Asn Lys Met Ala Ala Ala Phe Leu
      210          215          220
Phe Ser Gly Cys Asn Pro Gln Pro Leu Pro Ser Leu Leu Trp Glu Ser
      225          230          235          240
Pro Ala Ser Ser Pro Cys Tyr Phe Pro Pro Ser Trp Ile Val Val Gly
      245          250          255
Val His Lys Val Gly Ala Cys Ser Leu Gly Glu Glu Leu Gly Leu Cys
      260          265          270
Cys Leu Val Gly Thr Thr Ala Ser Phe Gly Tyr Leu Ile Pro Ser Tyr
      275          280          285
Ile Asn Ser Pro Gly Tyr Pro Val Ile Phe His Pro Thr Pro Ser Val
      290          295          300
Leu Val Asn
305

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<210> 6271  
 <211> 1437  
 <212> DNA  
 <213> Homo sapiens

<400> 6271

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 180  
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 240  
 gctgtatact ttgcatgtta ctccaaagcc aaagagcaat ttaatggcat tttcgtgcct  
 300  
 aacagcaata ttgtgcatct tttctcagct ggctctgcag cttttatcac aaattcctta  
 360  
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 aagcagatga atacactcca gtgtgctcgt tacgtttacc agaccgaagg cattcgtggc  
 480  
 ttctatagag gattaactgc ctcgatgct ggaatttcg aaactataat ctgctttgct  
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 600  
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 660  
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 720  
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 780  
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 1140  
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 1200  
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 1320  
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 1380  
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 1437

&lt;210&gt; 6272

&lt;211&gt; 296

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6272

Xaa Met Ala Thr Gly Gly Gln Gln Lys Glu Asn Thr Leu Leu His Leu



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Phe Ala Gly	Gly Cys Gly Gly Thr	Val Gly Ala Ile Phe	Thr Cys Pro
20	25	30	
Leu Glu Val	Ile Lys Thr Arg Leu	Gln Ser Ser Arg Leu	Ala Leu Arg
35	40	45	
Thr Val Tyr	Tyr Pro Gln Val His	Leu Gly Thr Ile Ser	Gly Ala Gly
50	55	60	
Met Val Arg	Pro Thr Ser Val Thr	Pro Gly Leu Phe	Gln Val Leu Lys
65	70	75	80
Ala Val Tyr	Phe Ala Cys Tyr Ser	Lys Ala Lys Glu	Gln Phe Asn Gly
85	90	95	
Ile Phe Val	Pro Asn Ser Asn Ile	Val His Leu Phe	Ser Ala Gly Ser
100	105	110	
Ala Ala Phe	Ile Thr Asn Ser Leu	Met Asn Pro Ile	Trp Met Val Lys
115	120	125	
Thr Arg Met	Gln Leu Glu Gln Lys	Val Arg Gly Ser	Lys Gln Met Asn
130	135	140	
Thr Leu Gln	Cys Ala Arg Tyr Val	Tyr Gln Thr Glu	Gly Ile Arg Gly
145	150	155	160
Phe Tyr Arg	Gly Leu Thr Ala Ser	Tyr Ala Gly Ile	Ser Glu Thr Ile
165	170	175	
Ile Cys Phe	Ala Ile Tyr Glu Ser	Leu Lys Lys Tyr	Leu Lys Glu Ala
180	185	190	
Pro Leu Ala	Ser Ser Ala Asn Gly	Thr Glu Lys Asn	Ser Thr Ser Phe
195	200	205	
Phe Gly Leu	Met Ala Ala Ala Leu	Ser Lys Gly Cys	Ala Ser Cys
210	215	220	
Ile Ala Tyr	Pro His Glu Val Ile	Arg Thr Arg Leu	Arg Glu Glu Gly
225	230	235	240
Thr Lys Tyr	Lys Ser Phe Val Gln	Thr Ala Arg Leu	Val Phe Arg Glu
245	250	255	
Glu Gly Tyr	Leu Ala Phe Tyr Arg	Gly Leu Phe Ala	Gln Leu Ile Arg
260	265	270	
Gln Ile Pro	Asn Thr Ala Ile Val	Leu Ser Thr Tyr	Glu Leu Ile Val
275	280	285	
Tyr Leu Leu	Glu Asp Arg Thr Gln		
290	295		

&lt;210&gt; 6273

&lt;211&gt; 2355

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6273

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ccccagacat gccgggtgttc acagagcaga tgatccagca ggagcagctg gactcgggtga

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180

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240

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300

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360  
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420  
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<212> PRT

<213> Homo sapiens

<400> 6276

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&lt;211&gt; 1206

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6277

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&lt;210&gt; 6279

&lt;211&gt; 2795

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6279

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 Asp Ala His Gln Thr Glu Thr Ser Ser Ser Gln Val Lys Asp Asn Lys  
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&lt;211&gt; 741

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6281

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<213> Homo sapiens

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Glu	Lys	Lys	Gln	Met	Val	Ala	Asn	Val	Glu	Lys	Gln	Leu	Glu	Glu	Ala
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Lys	Glu	Leu	Leu	Glu	Gln	Met	Asp	Leu	Glu	Val	Arg	Glu	Ile	Pro	Pro
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Gln	Ser	Arg	Gly	Met	Tyr	Ser	Asn	Arg	Met	Arg	Ser	Tyr	Lys	Gln	Glu
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<211> 2312

<212> DNA

<213> Homo sapiens

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<210> 6284

<211> 122

<212> PRT

<213> Homo sapiens

<400> 6284

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			20					25					30		
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<211> 2542

<212> DNA

<213> Homo sapiens

<400> 6285

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<210> 6286

<211> 57

<212> PRT

<213> Homo sapiens

<400> 6286

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			20					25					30		
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<210> 6287

<211> 1674

<212> DNA

<213> Homo sapiens

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&lt;210&gt; 6288



&lt;211&gt; 269

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6288

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          35           40           45
Ser Val Lys Leu Asp Glu His Ile Ile Pro Leu Gly Ser Met Ala Ile
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Asn Ser Ile Ser Lys Leu Thr Gln Leu Thr Gln Ser Ser Met Tyr Ser
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Leu Pro Asn Ala Pro Thr Leu Ala Asp Leu Glu Asp Asp Thr His Glu
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Ile Phe Glu Leu Asp Ser Cys Asn Gly Ser Gly Lys Val Cys Leu Val
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Tyr Lys Ser Gly Lys Pro Ala Leu Ala Glu Asp Thr Glu Ile Trp Phe
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Tyr Tyr Arg Leu Leu Ile Thr His Leu Gly Leu Pro Gln Trp Gln Tyr
          165          170          175
Ala Phe Thr Ser Tyr Gly Ile Ser Pro Gln Ala Lys Gln Trp Phe Ser
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Met Tyr Lys Pro Ile Thr Tyr Asn Thr Asn Leu Leu Thr Glu Glu Thr
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&lt;210&gt; 6289

&lt;211&gt; 1321

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6289

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<210> 6290

<211> 172

<212> PRT

<213> Homo sapiens

<400> 6290

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			20					25						30	
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			50					55						60	
Gln	Arg	Ser	Lys	Gln	Ala	Leu	Gln	Glu	Leu	Thr	Gln	Asn	Gln	Val	Val

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		85							90					95	
Ser	Met	Leu	Asp	Ile	Asn	Ala	Leu	Phe	Ala	Glu	Ala	Lys	His	Tyr	His
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Ala	Lys	Leu	Val	Asn	Ile	Arg	Lys	Glu	Met	Leu	Met	Leu	His	Glu	Lys
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Thr	Ser	Lys	Leu	Lys	Lys	Arg	Ala	Leu	Lys	Leu	Gln	Gln	Lys	Arg	Gln
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&lt;210&gt; 6291

&lt;211&gt; 2718

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6291

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2460  
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<210> 6292

<211> 497

<212> PRT

<213> Homo sapiens

<400> 6292

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Leu	Ser	Arg	Pro	Gln	Pro	Pro	Pro	Asp	Pro	Leu	Leu	Leu	Gln	Arg	Leu
		35					40					45			
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	50					55				60					
Leu	Asp	Ser	Ser	Arg	Cys	Leu	Met	Gln	Gln	Gly	Ile	Lys	Ala	Gly	Asp
65				70						75					80
Ala	Leu	Trp	Leu	Arg	Phe	Lys	Tyr	Tyr	Ser	Phe	Phe	Asp	Leu	Asp	Pro
			85					90					95		
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		100						105					110		
Asp	Leu	Leu	Leu	Glu	Glu	Ile	Asp	Cys	Thr	Glu	Glu	Glu	Met	Met	Val
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Ala	Leu	Ser	Asn	Leu	Glu	Val	Lys	Leu	Glu	Gly	Ser	Ala	Pro	Thr	Asp
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Ile	Phe	Arg	Pro	Arg	Lys	Leu	Thr	Leu	Lys	Gly	Tyr	Arg	Gln	His	Trp
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		260						265					270		
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Pro	Pro	Arg	Pro	Asp	Ala	Ser	Ala	Glu	Gly	Leu	Asn	Pro	Tyr	Gly	Leu
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          340          345          350
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Ala Gln Leu Arg Phe Ile Gln Ala Trp Gln Ser Leu Pro Asp Phe Gly
          370          375          380
Ile Ser Tyr Val Met Val Arg Phe Lys Gly Ser Arg Lys Asp Glu Ile
385          390          395          400
Leu Gly Ile Ala Asn Asn Arg Leu Ile Arg Ile Asp Leu Ala Val Gly
          405          410          415
Asp Val Val Lys Thr Trp Arg Phe Ser Asn Met Arg Gln Trp Asn Val
          420          425          430
Asn Trp Asp Ile Arg Gln Val Ala Ile Glu Phe Asp Glu His Ile Asn
          435          440          445
Val Ala Phe Ser Cys Val Ser Ala Ser Cys Arg Ile Val His Glu Tyr
          450          455          460
Ile Gly Gly Tyr Ile Phe Leu Ser Thr Arg Glu Arg Ala Arg Gly Glu
465          470          475          480
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Phe

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&lt;210&gt; 6293

&lt;211&gt; 750

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6293

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<210> 6294  
 <211> 250  
 <212> PRT  
 <213> Homo sapiens

<400> 6294  
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 Gly Gly Thr Ala Ile Ala Gly Ser Val Glu Ala Val Ala Arg Leu Lys  
 35 40 45  
 Arg Ser Arg Leu Lys Val Arg Phe Cys Thr Asn Glu Ser Gln Lys Ser  
 50 55 60  
 Arg Ala Glu Leu Val Gly Gln Leu Gln Arg Leu Gly Phe Asp Ile Ser  
 65 70 75 80  
 Glu Gln Glu Val Thr Ala Pro Ala Pro Ala Cys Gln Ile Leu Lys  
 85 90 95  
 Glu Arg Gly Leu Arg Pro Tyr Leu Leu Ile His Asp Gly Val Arg Ser  
 100 105 110  
 Glu Phe Asp Gln Ile Asp Thr Ser Asn Pro Asn Cys Val Val Ile Ala  
 115 120 125  
 Asp Ala Gly Glu Ser Phe Ser Tyr Gln Asn Met Asn Asn Ala Phe Gln  
 130 135 140  
 Val Leu Met Glu Leu Glu Lys Pro Val Leu Ile Ser Leu Gly Lys Gly  
 145 150 155 160  
 Arg Tyr Tyr Lys Glu Thr Ser Gly Leu Met Leu Asp Val Gly Pro Tyr  
 165 170 175  
 Met Lys Ala Leu Glu Tyr Ala Cys Gly Ile Lys Ala Glu Val Val Gly  
 180 185 190  
 Lys Pro Ser Pro Glu Phe Phe Lys Ser Ala Leu Gln Ala Ile Gly Val  
 195 200 205  
 Glu Ala His Gln Ala Val Met Ile Gly Asp Asp Ile Val Gly Asp Val  
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 <212> DNA  
 <213> Homo sapiens

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1860



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<210> 6296

<211> 399

<212> PRT

<213> Homo sapiens

<400> 6296

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			20					25					30		
Ala	Cys	Gly	Cys	Arg	Leu	Val	Leu	Gly	Gly	Arg	Asp	Asp	Val	Ser	Ala
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Gly	Leu	Arg	Gly	Ser	His	Gly	Ala	Arg	Gly	Glu	Pro	Leu	Asp	Pro	Ala
		50				55					60				
Arg	Pro	Leu	Gln	Arg	Pro	Pro	Arg	Pro	Glu	Val	Pro	Arg	Ala	Phe	Arg
65					70					75				80	
Arg	Gln	Pro	Arg	Ala	Ala	Ala	Pro	Ser	Phe	Phe	Phe	Ser	Ser	Ile	Lys
				85					90					95	
Gly	Gly	Arg	Arg	Ser	Ile	Ser	Phe	Ser	Val	Gly	Ala	Ser	Ser	Val	Val
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			165					170						175	
Glu	Ala	Ile	Phe	Glu	Leu	Pro	Phe	Phe	Phe	His	Asn	Pro	Lys	Pro	Phe
			180					185					190		
Phe	Thr	Leu	Ala	Lys	Glu	Leu	Tyr	Pro	Gly	Asn	Tyr	Lys	Pro	Asn	Val
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Thr	His	Tyr	Phe	Leu	Arg	Leu	Leu	His	Asp	Lys	Gly	Leu	Leu	Leu	Arg
		210				215					220				
Leu	Tyr	Thr	Gln	Asn	Ile	Asp	Gly	Leu	Glu	Arg	Val	Ser	Gly	Ile	Pro
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Thr	Val	Cys	Gln	Arg	Pro	Phe	Pro	Gly	Glu	Asp	Ile	Arg	Ala	Asp	Val
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		325		330		335									
Ser	Val	Pro	Arg	Leu	Leu	Ile	Asn	Arg	Asp	Leu	Val	Gly	Pro	Leu	Ala
		340		345		350									
Trp	His	Pro	Arg	Ser	Arg	Asp	Val	Ala	Gln	Leu	Gly	Asp	Val	Val	His
		355		360		365									
Gly	Val	Glu	Ser	Leu	Val	Glu	Leu	Leu	Gly	Trp	Thr	Glu	Glu	Met	Arg
		370		375		380									
Asp	Leu	Val	Gln	Arg	Glu	Thr	Gly	Lys	Leu	Asp	Gly	Pro	Asp	Lys	
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&lt;210&gt; 6297

&lt;211&gt; 472

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6297

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420
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472

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&lt;210&gt; 6298

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6298

Met	Ser	Ser	Glu	Val	Ser	Ala	Arg	Arg	Asp	Ala	Lys	Lys	Leu	Val	Arg
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			20				25					30			
Pro	Phe	Gly	Leu	Glu	Glu	Pro	Gln	Trp	Val	Pro	Asp	Lys	Glu	Cys	Arg
		35				40					45				
Arg	Cys	Met	Gln	Cys	Asp	Ala	Lys	Phe	Asp	Phe	Leu	Thr	Arg	Lys	His
	50				55				60						
His	Cys	Arg	Arg	Cys	Gly	Lys	Cys	Phe	Cys	Asp	Arg	Cys	Cys	Ser	Gln
65				70				75						80	
Lys	Val	Pro	Leu	Arg	Arg	Met	Cys	Phe	Val	Asp	Pro	Val	Arg	Gln	Cys
			85			90							95		
Ala	Glu	Cys	Ala	Leu	Val	Ser	Leu	Lys	Glu	Ala	Glu	Phe	Tyr	Asp	Lys

	100		105		110										
Gln	Leu	Lys	Val	Leu	Leu	Ser	Gly	Lys	Asp	Gly	Cys	Pro	Ala	Gln	Ser
	115		120		125										
Cys	Ala	Leu	Arg	Gln	Pro	Ala	Pro	Arg	Val	Cys	Gly	Asp	Ala	Val	Gly
	130		135		140										
Cys	Ala														
145															

&lt;210&gt; 6299

&lt;211&gt; 1466

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6299

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1200

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<210> 6300

<211> 372

<212> PRT

<213> Homo sapiens

<400> 6300

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		20						25					30		
Ser	Gly	Gly	Pro	Arg	Arg	Ser	Arg	Gly	Gly	Gln	Pro	Ala	His	Trp	Pro
	35						40						45		
Arg	Glu	Ser	Leu	Val	Leu	Tyr	His	Trp	Thr	Gln	Ser	Phe	Ser	Ser	Gln
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Lys	Val	Arg	Leu	Val	Ile	Ala	Glu	Lys	Gly	Leu	Val	Cys	Glu	Glu	Arg
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Asp	Val	Ser	Leu	Pro	Gln	Ser	Glu	His	Lys	Glu	Pro	Trp	Phe	Met	Arg
				85					90					95	
Leu	Asn	Leu	Gly	Glu	Glu	Val	Pro	Val	Ile	Ile	His	Arg	Asp	Asn	Ile
			100					105					110		
Ile	Ser	Asp	Tyr	Asp	Gln	Ile	Ile	Asp	Tyr	Val	Glu	Arg	Thr	Phe	Thr
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Ala	Arg	Val	Leu	Gln	Tyr	Arg	Glu	Leu	Leu	Asp	Ala	Leu	Pro	Met	Asp
145					150					155					160
Ala	Tyr	Thr	His	Gly	Cys	Ile	Leu	His	Pro	Glu	Leu	Thr	Thr	Asp	Ser
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Glu	His	Asp	Asp	Val	Ser	Tyr	Leu	Lys	Lys	Ile	Leu	Gly	Glu	Leu	Ala
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Met	Val	Leu	Asp	Gln	Ile	Glu	Ala	Glu	Leu	Glu	Lys	Arg	Lys	Leu	Glu
				245					250					255	
Asn	Glu	Gly	Gln	Lys	Cys	Glu	Leu	Trp	Leu	Cys	Gly	Cys	Ala	Phe	Thr
			260					265					270		
Leu	Ala	Asp	Val	Leu	Leu	Gly	Ala	Thr	Leu	His	Arg	Leu	Lys	Phe	Leu
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Gly Asp Ile His Thr Thr Leu Leu Ser Ala Val Ile Pro Asn Ala Phe				
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Arg Leu Val Lys Arg Lys Pro Pro Ser Phe Phe Gly Ala Ser Phe Leu				
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Met Gly Ser Leu Gly Gly Met Gly Tyr Phe Ala Tyr Trp Tyr Leu Lys				
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&lt;210&gt; 6301

&lt;211&gt; 911

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6301

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&lt;210&gt; 6302

&lt;211&gt; 202

&lt;212&gt; PRT

<213> Homo sapiens

<400> 6302

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Ser Ser Val Ser Arg Gly Asn Val Ser Thr Pro Pro Arg His Ser Ser
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Gly Ser Leu Thr Pro Pro Val Thr Pro Pro Ile Thr Pro Ser Ser Ser
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Ile Ser Ser Glu Ala Ile Leu Ser Ser Met Cys Met Asn Gly Gly Glu
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Glu Lys Pro Phe Ala Cys Pro Val Pro Gly Cys Lys Lys Arg Tyr Lys
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Ile Arg Val Arg Lys Pro Phe Lys Cys Arg Cys Gly Lys Ser Tyr Lys
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<210> 6303

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<212> DNA

<213> Homo sapiens

<400> 6303

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 <213> Homo sapiens

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 35 40 45  
 Asp Ser His Leu Trp Lys Leu Leu Asp Arg His Ala Asn Thr Ile Arg  
 50 55 60  
 Leu Phe Val Leu Leu Pro Glu Gln Ser Pro Val Ser Tyr Ser Lys Arg  
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 Thr Ala Tyr Gln Lys Ala Gly Gly Asp Ser Gly Asn Val Asp Asp Asp  
 85 90 95  
 Cys Glu Arg Val Lys Gly Pro Val Gly Ser Leu Lys Ser Val Glu Ala  
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 Ile Leu Glu Glu Ser Thr Glu Lys Leu Lys Ser Leu Ser Leu Gln Gln  
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 130 135 140  
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<210> 6306

<211> 474

<212> PRT

<213> Homo sapiens

<400> 6306

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Ile	Val	Glu	Ala	Ser	Gly	Gly	Gly	Ala	Phe	Leu	Val	Leu	Pro	Leu	Ser
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Gly	Pro	Val	Leu	Asp	Ile	Asp	Trp	Cys	Pro	His	Asn	Asp	Gln	Val	Ile
				85					90					95	
Ala	Ser	Gly	Ser	Glu	Asp	Cys	Thr	Val	Met	Val	Trp	Gln	Ile	Pro	Glu
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Pro Lys Arg Gly Leu Asp Val Asn Lys Cys Glu Ile Ala Arg Phe Phe		
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Lys Leu His Glu Arg Lys Cys Glu Pro Ile Ile Met Thr Val Pro Arg		
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Glu Ala Ala Leu Glu Ala Glu Glu Trp Phe Glu Gly Lys Asn Ala Asp		
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Ala Ser Val Gln Asn Glu Ala Lys Leu Asp Glu Ile Leu Lys Glu Ile		
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Lys Ser Ile Lys Asp Thr Ile Cys Asn Gln Asp Glu Arg Ile Ser Lys		
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&lt;210&gt; 6307

&lt;211&gt; 2119

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6307

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&lt;210&gt; 6308

&lt;211&gt; 483

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6308

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225             230             235             240
Tyr Gln Met Ile Phe Ser Ile Trp Leu Leu Ala Phe Ser Pro Gln Met
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Cys Glu His Leu Arg Arg Tyr Asn Ile Ile Pro Val Leu Ser Asp Ile
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Leu Gln Glu Ser Val Lys Glu Lys Val Thr Arg Ile Ile Leu Ala Ala
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Phe Arg Asn Phe Leu Glu Lys Ser Thr Glu Arg Glu Thr Arg Gln Glu
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Tyr Ala Leu Ala Met Ile Gln Cys Lys Val Leu Lys Gln Leu Glu Asn
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Phe Leu Leu Glu Lys Leu Gly Glu Ser Val Gln Asp Leu Ser Ser Phe
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Val His Lys Ser Glu Lys Phe Trp Arg Glu Asn Ala Val Arg Leu Asn
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Leu Gln Glu Ala Arg Pro Leu Gly Leu Leu Val Pro Asp Ala Gly Asp
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Leu Arg Leu Pro Glu Pro Gln Leu Leu Pro Glu Arg Arg Val Leu Ala
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Phe	Pro	Glu	Thr	Trp	Thr	Ala	Glu	Lys	Ile	Met	Gln	Glu	Tyr	Gln	Leu
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 Asp Glu Ala Asp Glu Lys Gly Trp Phe Pro Leu His Glu Ala Val Val  
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			20					25					30		
Thr	Thr	Thr	Leu	Ser	Ser	Ala	Ser	Met	Ser	Trp	Ser	Ser	Ser	Ser	Ser
		35					40					45			
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	50					55					60				
Gly	Thr	Phe	Thr	Ser	Pro	Glu	Cys	Arg	Cys	Leu	Tyr	Asp	Val	Lys	Pro



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&lt;210&gt; 6322

&lt;211&gt; 196

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6322

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Glu Arg Arg Glu Pro Ile Gly Ser Met Ser Ser Met Glu Val Asn Val
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Asp Met Leu Glu Gln Met Asp Leu Met Asp Ile Ser Asp Gln Glu Ala
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Pro Ala Leu Gly Pro Glu Ser Ser Thr Cys Gln Asn Glu Ile Thr Leu
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Ser Thr Cys Thr Asp Ser Ala Thr Arg Asp Ile Ser Glu Gly Gly Glu
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Ser Pro Val Val Gln Ser Asp Glu Glu Glu Val Gln Val Asp Thr Ala
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Leu Ala Thr Ser His Thr Asp Arg Glu Ala Thr Pro Asp Gly Gly Glu
      180          185          190
Asp Ser Asp Ser
      195

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**What is claimed is:**

1. An isolated nucleic acid molecule encoding a polypeptide comprising an amino acid sequence that is at least 85% identical to a polypeptide including an amino acid sequence selected from the group consisting of SEQ ID NO:2 $n$ , wherein  $n$  is any integer 1-3161, or the complement thereof.
2. The isolated nucleic acid molecule of claim 1, said molecule hybridizing under stringent conditions to a nucleic acid sequence complementary to a nucleic acid molecule comprising the sequence of nucleotides selected from the group consisting of SEQ ID NO:2 $n$ , wherein  $n$  is any integer 1-3161, or the complement thereof.
3. The isolated nucleic acid molecule of claim 1, said molecule encoding a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2 $n$ , wherein  $n$  is any integer 1-3161, or an amino acid sequence comprising one or more conservative substitutions in the amino acid sequence selected from the group consisting of SEQ ID NO: 2 $n$ .
4. The isolated nucleic acid molecule of claim 1, wherein said molecule encodes a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2 $n$ , wherein  $n$  is any integer 1-3161.
5. The isolated nucleic acid molecule of claim 1, wherein said molecule comprises the sequence of nucleotides selected from the group consisting of SEQ ID NO:2 $n$ -1, wherein  $n$  is any integer 1-3161, or the complement thereof.
6. An oligonucleotide less than 100 nucleotides in length and comprising at least 10 contiguous nucleotides selected from the group consisting of SEQ ID NO:2 $n$ -1, wherein  $n$  is any integer 1-3161, or the complement thereof.
7. A vector comprising the nucleic acid molecule of claim 1.

8. The vector of claim 7, wherein said vector is an expression vector.
9. A host cell comprising the isolated nucleic acid molecule of claim 1.
10. A substantially purified polypeptide comprising an amino acid sequence at least 80% identical to a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO:  $2n$ , wherein  $n$  is any integer 1-3161.
11. The polypeptide of claim 10, wherein said polypeptide comprises the amino acid sequence selected from the group consisting of SEQ ID NO:  $2n$ , wherein  $n$  is any integer 1-3161.
12. An antibody that selectively binds to the polypeptide of claim 10.
13. A pharmaceutical composition comprising a therapeutically or prophylactically effective amount of a therapeutic selected from the group consisting of:
  - a) the nucleic acid of claim 1;
  - b) the polypeptide of claim 10; and
  - c) the antibody of claim 12;and a pharmaceutically acceptable carrier.
14. A kit comprising in one or more containers, a therapeutically or prophylactically effective amount of the pharmaceutical composition of claim 13.
15. A method of producing the polypeptide of claim 10, said method comprising culturing the host cell of claim 9 under conditions in which the nucleic acid molecule is expressed.
16. A method of detecting the presence of the polypeptide of claim 10 in a sample, comprising contacting the sample with a compound that selectively binds to said polypeptide under conditions allowing the formation of a complex between said polypeptide and said



compound, and detecting said complex, if present, thereby identifying said polypeptide in said sample.

17. A method of detecting the presence of a nucleic acid molecule of claim 1 in a sample, the method comprising contacting the sample with a nucleic acid probe or primer that selectively binds to the nucleic acid molecule and determining whether the nucleic acid probe or primer bound to the nucleic acid molecule of claim 1 is present in the sample.

18. A method for modulating the activity of the polypeptide of claim 10, the method comprising contacting a cell sample comprising the polypeptide of claim 10 with a compound that binds to said polypeptide in an amount sufficient to modulate the activity of the polypeptide.

19. The use of a therapeutic in the manufacture of a medicament for treating a syndrome associated with a ORFX-associated disorder, wherein said therapeutic is selected from the group consisting of:

- a) the nucleic acid of claim 1;
- b) the polypeptide of claim 10; and
- c) the antibody of claim 12.

20. A method for screening for a modulator of activity or of latency or predisposition to an ORFX-associated disorder, said method comprising:

- a) contacting a test compound with the polypeptide of claim 10; and
- b) determining if said test compound binds to said polypeptide,

wherein binding of said test compound to said polypeptide indicates the test compound is a modulator of activity or of latency or predisposition to an ORFX-associated disorder.

21. A method for screening for a modulator of activity or of latency or predisposition to an ORFX-associated disorder, said method comprising:

- a) administering a test compound to a test subject at an increased risk ORFX-associated disorder, wherein said test subject recombinantly expresses a polypeptide encoded by the nucleotide of claim 1;

- b) measuring expression the activity of said protein in said test subject;
- c) measuring the activity of said protein in a control subject that recombinantly expresses said protein and is not at increased risk for an ORFX-associated disorder; and
- d) comparing expression of said protein in said test subject and said control subject, wherein a change in the activity of said protein in said test subject relative to said control subject indicates the test compound is a modulator or of latency of predisposition to an ORFX-associated disorder.

22. The method of claim 20, wherein said test animal is a recombinant test animal that expresses a test protein transgene or expresses said transgene under the control of a promoter at an increased level relative to a wild-type test animal, and wherein said promoter is not the native gene promoter of said transgene.

23. A method for determining the presence of or predisposition to a disease associated with altered levels of a polypeptide of claim 11 in a subject, the method comprising:

- a) measuring the amount of the polypeptide in a sample from said subject; and
- b) comparing the amount of said polypeptide in step (a) to the amount of the polypeptide present in a control sample,

wherein an alteration in the level of the polypeptide in step (a) as compared to the control sample indicates the presence of or predisposition to a disease in said subject.

24. The method of claim 23, wherein said subject is a human.

25. A method for determining the presence of or predisposition to a disease associated with altered levels the nucleic acid molecule of claim 1 in a subject, the method comprising:

- a) measuring the amount of the nucleic acid in a sample from the mammalian subject; and
- b) comparing the amount of said nucleic acid in step (a) to the amount of the nucleic acid present in a control sample,

wherein an alteration in the level of the nucleic acid in step (a) as compared to the control sample indicates the presence of or predisposition to said disease in said subject.

26. The method of claim 25, wherein said subject is a human.

27. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject polypeptide of claim 10 in an amount sufficient to alleviate or prevent said pathological condition.

28. The method of claim 27, wherein said subject is a human.

29. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject nucleic acid molecule of claim 1 in an amount sufficient to alleviate or prevent said pathological condition.

30. The method of claim 29, wherein said subject is a human.

31. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject antibody of claim 12 in an amount sufficient to alleviate or prevent said pathological condition.

32. The method of claim 31, wherein said subject is a human.